



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 127446

TO: Terra Gibbs

Location:

Art Unit: 1635

July 16, 2004

208

Case Serial Number: 10/024369

From: P. Sheppard

Location: Remsen Building

Phone: (571) 272-2529

sheppard@uspto.gov

### Search Notes

7/15/04

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Schreiber, David

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**From:** Gibbs, Terra  
**Sent:** Monday, June 28, 2004 10:57 AM  
**To:** Schreiber, David  
**Subject:** Sequence search request...

Hi David,

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:47 in USSN 10/024,369,

**NOTE: SEQ ID NO:47 is a 20-mer**

where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 50 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched if possible.

*Terra Cotta Gibbs, Ph.D.  
Art Unit 1635  
Remsen Building 2D10  
571-272-0758*

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: July 15, 2004, 18:07:01 ; Search time 0.001 Seconds  
(without alignments)

0.320 Million cell updates/sec

Title: us-10-024-369-47

Perfect score: 20  
Sequence: 1 cccacccttcttgggcagaag 20

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 0.5

Searched: 1 seqs, 8 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 8  
Maximum DB seq length: 50

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 2000 summaries

Database : estdb :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Match	Length	ID	Description
C 1	6	30.0	8	1	CA851350
2	4	20.0	8	1	CA851350

#### ALIGNMENTS

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RESULT 1
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LOCUS
DEFINITION
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  D12G08.N20.14.ab1 cDNA Peking library 2, 4 day SCN3 Glycine max
  cDNA clone D12G08 5', mRNA sequence.
ACCESSION
  CA851350
VERSION
  EST.
KEYWORDS
  Glycine max (soybean)
ORGANISM
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
  rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;
  Glycine.
REFERENCE
  1 (bases 1 to 8)
AUTHORS
  Alkharouf,N.W., Khan,R. and Matthews,B.F.
TITLE
  Analysis of expressed sequence tags from roots of resistant soybean
  infected by the soybean cyst nematode
JOURNAL
  Unpublished (2002)
COMMENT
  Contact: Alkharouf, N.W.
  Soybean Genomics and Improvement Laboratory (SGIL)
  US Department of Agriculture (USDA), ARS, PSI
  Bldg.006, Rm 118, 10300 Baltimore Ave., Beltsville, MD 20705-2350,
  USA
  Tel: 301 504 5750
  Fax: 301 504 5728
  Email: alkharouf@ba.ars.usda.gov.

CA851350/c
LOCUS
DEFINITION
  CA851350      8 bp  mRNA      linear      EST 01-AUG-2003
  D12G08.N20.14.ab1 cDNA Peking library 2, 4 day SCN3 Glycine max
  cDNA clone D12G08 5', mRNA sequence.
ACCESSION
  CA851350
VERSION
  EST.
KEYWORDS
  Glycine max (soybean)
ORGANISM
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
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  Glycine.
REFERENCE
  1 (bases 1 to 8)
AUTHORS
  Alkharouf,N.W., Khan,R. and Matthews,B.F.
TITLE
  Analysis of expressed sequence tags from roots of resistant soybean
  infected by the soybean cyst nematode
JOURNAL
  Unpublished (2002)
COMMENT
  Contact: Alkharouf, N.W.
  Soybean Genomics and Improvement Laboratory (SGIL)
  US Department of Agriculture (USDA), ARS, PSI
  Bldg.006, Rm 118, 10300 Baltimore Ave., Beltsville, MD 20705-2350,
  USA
  Tel: 301 504 5750
  Fax: 301 504 5728
  Email: alkharouf@ba.ars.usda.gov.

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Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 8 TCTTGGG 14  
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Db 8 TTTTGGG 2

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LOCUS  
DEFINITION  
 CA851350 8 bp mRNA linear EST 01-AUG-2003  
 D12G08.N20.14.ab1 cDNA Peking library 2, 4 day SCN3 Glycine max  
 cDNA clone D12G08 5', mRNA sequence.  
ACCESSION  
 CA851350  
VERSION  
 EST.  
KEYWORDS  
 Glycine max (soybean)  
ORGANISM  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;  
 rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;  
 Glycine.

REFERENCE  
1 (bases 1 to 8)  
AUTHORS  
Alkharouf,N.W., Khan,R. and Matthews,B.F.  
TITLE  
Analysis of expressed sequence tags from roots of resistant soybean  
infected by the soybean cyst nematode  
JOURNAL  
Unpublished (2002)  
COMMENT  
Contact: Alkharouf, N.W.  
Soybean Genomics and Improvement Laboratory (SGIL)  
US Department of Agriculture (USDA), ARS, PSI  
Bldg.006, Rm 118, 10300 Baltimore Ave., Beltsville, MD 20705-2350,  
USA  
Tel: 301 504 5750  
Fax: 301 504 5728  
Email: alkharouf@ba.ars.usda.gov.

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/db\_xref="taxon:3847"  
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Best Local Similarity 100.0%; Pred. No. 0;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 2 CCCA 5

Search completed: July 15, 2004, 18:07:02

Job time : 1 secs



GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: July 15, 2004, 16:39:00 ; Search time 0.001 Seconds  
(without alignments)  
32.440 Million cell updates/sec

Title: us-10-024-369-47

Perfect score: 20

Sequence: 1 cccacctcttggcgagaag 20

Scoring table: IDENTITY NUC

Gapop 10<sup>-0</sup> , Gapext 0.5

Searched: 77 seqs, 811 residues

Total number of hits satisfying chosen parameters: 154

Minimum DB seq length: 8

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2000 summaries

Database : rgddb.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	ID	Description
1	12	60.0	15	BD061440
2	10	50.0	11	AX623364
3	10	50.0	11	AX630785
C 4	9.4	47.0	11	AX472203
C 5	9	45.0	10	BD238992
C 6	9	45.0	10	BD239512
C 7	9	45.0	10	BD239813
8	9	45.0	11	AR353840
9	9	45.0	11	AX625163
10	9	45.0	11	AX632584
11	9	45.0	12	AR349259
12	9	45.0	12	AR349261
C 13	8.4	42.0	10	AX2569
C 14	8.4	42.0	10	AR043677
15	8.4	42.0	10	BD238844
16	8.4	42.0	10	BD239019
C 17	8.4	42.0	10	BD240663
C 18	8.4	42.0	10	AX303500
C 19	8.4	42.0	10	AX152798
C 20	8.4	42.0	10	AX301616
21	8.4	42.0	10	AX374630
C 22	8.4	42.0	10	AX805907
23	8.4	42.0	10	BD161343
C 24	8.4	42.0	10	BD166511
C 25	8.4	42.0	11	AR074494
C 26	8.4	42.0	11	AR081174
C 27	8.4	42.0	11	AR085371
C 28	8.4	42.0	11	AR088119
C 29	8.4	42.0	11	AR104278
C 30	8.4	42.0	11	AR143540
C 31	8.4	42.0	11	AR171446
C 32	8.4	42.0	11	AR171617
C 33	8.4	42.0	11	BD2433207

C 34	8.4	42.0	11	I34822
C 35	8.4	42.0	11	AX412934
C 36	8.4	42.0	11	AX470593
C 37	8.4	42.0	11	AX471678
C 38	8.4	42.0	11	AX471682
C 39	8.4	42.0	11	AX623377
C 40	8.4	42.0	11	AX623396
C 41	8.4	42.0	11	AX623509
C 42	8.4	42.0	11	AX625581
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C 64	8	40.0	10	BD238780
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C 89	5.4	27.0	11	AX629947
C 90	5.2	26.0	11	AX626949
C 91	5.2	26.0	11	AX627089
C 92	5.2	26.0	11	AX632853
C 93	5	25.0	9	AX668629
C 94	5	25.0	9	AX668630
C 95	5	25.0	9	AX668813
C 96	5	25.0	9	AX668814
C 97	5	25.0	10	BD239813
C 98	5	25.0	10	BD239823
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C 100	5	25.0	10	AX119168
C 101	5	25.0	10	AX152217
C 102	5	25.0	10	AX301610
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CTTCTTGGG 14
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Db 1 CTTCTTGGG 10

RESULT 4
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LOCUS      11 bp      DNA      linear      PAT 09-AUG-2002
DEFINITION Sequence 194 from Patent WO02053775.
ACCESSION  AX472203
VERSION     AX472203.1 GI:22207240
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS   Hustert,E., Haberl,M. and Wojnowski,L.
TITLE     Identification of the genetic determinants of the polymorphic
JOURNAL   cyp3a5 expression
PATENT:   WO 02053775-A 194 11-JUL-2002;
EPIDAUROS BIOTECHNOLOGIE AG (DE)
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LOCUS      10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD238992
VERSION     BD238992.1 GI:33048762
KEYWORDS   JP 2002534056-A/410.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 10)
AUTHORS   Roberts,B.L. and Shankara,S.
TITLE     Preparation and use of superior vaccines
JOURNAL   Patent: JP 2002534056-A 410 15-OCT-2002;
GENZYME CORP
OS Homo sapiens (human)
PN JP 2002534056-A/410
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090041,19-JUN-1998 US 60/090040 PR
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Db 9 CCCACCTTC 1

RESULT 6
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DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD239512
VERSION     BD239512.1 GI:33049282
KEYWORDS   JP 2002534056-A/930.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 10)
AUTHORS   Roberts,B.L. and Shankara,S.
TITLE     Preparation and use of superior vaccines
JOURNAL   Patent: JP 2002534056-A 930 15-OCT-2002;
GENZYME CORP
OS Homo sapiens (human)
PN JP 2002534056-A/930
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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C12N1/19,
G01N37/00,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
G01N33/566, PC
CC Preparation and use of superior vaccines

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FH	Key	Location/Qualifiers																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
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REFERENCE  
AUTHORS Petersohn, D., Conradt, M. and Hofmann, K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 9626 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)  
FEATURES Location/Qualifiers  
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LOCUS AR349259 12 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 6 from patent US 6583986.  
ACCESSION AR349259  
VERSION AR349259.1 GI:33749984  
KEYWORDS Unknown.  
SOURCE Unclassified.  
ORGANISM  
REFERENCE 1 (bases 1 to 12)  
AUTHORS Storti, W.J., Sibley, K., Ovadia, S., Kimball, S. and Falvo, B.  
TITLE Method and apparatus for managing thermal energy emissions  
JOURNAL Patent: US 6583986-A 6 24-JUN-2003;  
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LOCUS AR349261 12 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 8 from patent US 6583986.  
ACCESSION AR349261  
VERSION AR349261.1 GI:33749986  
KEYWORDS Unknown.  
SOURCE Unclassified.  
ORGANISM  
REFERENCE 1 (bases 1 to 12)  
AUTHORS Storti, W.J., Sibley, K., Ovadia, S., Kimball, S. and Falvo, B.  
TITLE Method and apparatus for managing thermal energy emissions  
JOURNAL Patent: US 6583986-A 8 24-JUN-2003;  
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Db 2 TTCTTGGGC 10  
RESULT 13  
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LOCUS AR349269 10 bp DNA linear PAT 22-JAN-2000  
DEFINITION Sequence 10 from Patent WO9812320.  
ACCESSION AR349269  
VERSION AR349269.1 GI:6741228  
KEYWORDS unidentified  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 10)  
AUTHORS Stocklin, E. and Groner, B.  
TITLE NUCLEIC ACID CONSTRUCT CODING FOR A PROTEIN COMPLEX FROM A STAT  
PROTEIN AND A NUCLEAR RECEPTOR AND ITS USE  
JOURNAL Patent: WO 9812320-A 10 26-MAR-1998;  
STOCKLIN ELISABETH (CH); GRONER BERND (CH)  
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Db 10 TTCTTGGGAA 1  
RESULT 14  
AR043677/c  
LOCUS AR043677 10 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 47 from patent US 5814517.  
ACCESSION AR043677  
VERSION AR043677.1 GI:5964685  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 10)  
AUTHORS Seidel, H., Martin, and Lamb, I., Peter.  
TITLE DNA spacer regulatory elements responsive to cytokines and methods  
for their use  
JOURNAL Patent: US 5814517-A 47 29-SEP-1998;  
FEATURES Location/Qualifiers  
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LOCUS BD238844 10 bp DNA linear PAT 17-JUL-2003  
DEFINITION Preparation and use of superior vaccines.  
ACCESSION BD238844  
VERSION BD238844.1 GI:33048614  
KEYWORDS JP 2002534056-A/262.  
SOURCE Homo sapiens (human)

ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 10)  
AUTHORS Roberts,B.L. and Shankara,S.  
TITLE Preparation and use of superior vaccines  
JOURNAL Patent: JP 2002534056-A 262 15-OCT-2002;  
GENZYME CORP  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002534056-A/262  
PD 15-OCT-2002  
PF 18-JUN-1999 JP 2000554749  
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PI BRUCE L ROBERTS,SRINIVAS SHANKARA  
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC  
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DEFINITION Preparation and use of superior vaccines.  
ACCESSION BD239019  
VERSION BD239019.1 GI:33048789  
KEYWORDS JP 2002534056-A/437.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 10)  
AUTHORS Roberts,B.L. and Shankara,S.  
TITLE Preparation and use of superior vaccines  
JOURNAL Patent: JP 2002534056-A 437 15-OCT-2002;  
GENZYME CORP  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002534056-A/437  
PD 15-OCT-2002  
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08-DEC-1998 US 60/111715  
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Db 1 CCACCTGCTT 10  
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BD240663/c  
LOCUS BD240663 10 bp DNA linear PAT 17-JUL-2003  
DEFINITION Preparation and use of superior vaccines.  
ACCESSION BD240663  
VERSION BD240663.1 GI:33050433  
KEYWORDS JP 2002534056-A/2081.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 10)  
AUTHORS Roberts,B.L. and Shankara,S.  
TITLE Preparation and use of superior vaccines  
JOURNAL Patent: JP 2002534056-A 2081 15-OCT-2002;  
GENZYME CORP  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002534056-A/2081  
PD 15-OCT-2002  
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C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
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CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
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RESULT 18
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LOCUS AR303500 10 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 225 from patent US 6544736.
ACCESSION AR303500
VERSION AR303500.1 GI:31692276
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
    AUTHORS Shimamoto,A., Furuichi,Y., Shibata,Y., Funaki,H., Ohara,E. and Watahiki,M.
    TITLE Method for synthesizing cDNA from mRNA sample
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Best Local Similarity 90.0%; Pred. No. 24;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 8 TCTTGGCGAG 17
Db 1 TCTTGGCGAG 10

RESULT 19
AX152798/c
LOCUS AX152798 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 713 from Patent WO0138577.
ACCESSION AX152798
VERSION AX152798.1 GI:14534449
KEYWORDS
    SOURCE Homo sapiens (human)
    ORGANISM Homo sapiens
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
    AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
    TITLE Human transcriptomes
    JOURNAL Patent: WO 0138577-A 713 31-MAY-2001;
    FEATURES
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            1..10
                Location/Qualifiers
                    /organism="Homo sapiens"
                    /mol_type="unassigned DNA"
                    /db_xref="taxon:9606"

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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 24;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTTGGGC 15
Db 10 CTTCTTGGGC 1

RESULT 20
AX301616/c
LOCUS AX301616 10 bp DNA linear PAT 30-NOV-2001
DEFINITION Sequence 330 from Patent WO0185941.
ACCESSION AX301616
VERSION AX301616.1 GI:17382699
KEYWORDS
    SOURCE Homo sapiens (human)
    ORGANISM Homo sapiens
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
    AUTHORS Versteeg,R. and Caron,H.N.
    TITLE Myc targets
    JOURNAL Patent: WO 0185941-A 330 15-NOV-2001;
    FEATURES
        source
            1..10
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"
Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 24;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTTGGGC 15
Db 10 CTTCTTGGGC 1

RESULT 21
AX374630
LOCUS AX374630 10 bp DNA linear PAT 01-MAR-2002
DEFINITION Sequence 51 from Patent WO0210454.
ACCESSION AX374630
VERSION AX374630.1 GI:19169527
KEYWORDS
    SOURCE Homo sapiens (human)
    ORGANISM Homo sapiens
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
    AUTHORS Choi,J.Y., Koshy,B., Kliem,S. and Stephens,J.C.
    TITLE Haplotypes of the alas2 gene
    JOURNAL Patent: WO 0210454-A 51 07-FEB-2002;
    FEATURES
        source
            1..10
                Location/Qualifiers
                    /organism="Homo sapiens"
                    /mol_type="unassigned DNA"
                    /db_xref="taxon:9606"
Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 24;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTTGGGC 15
Db 1 CATCTTGGGC 10

```

```
RESULT 22
AX805907/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
FEATURES
    source
        1..10
        /organism="synthetic construct"
        /mol_type="unassigned DNA"
        /db_xref="taxon:32630"
        /note="stuffer sequence"
Query Match
Best Local Similarity
Matches
    42.0%; Score 8.4; DB 1; Length 10;
    90.0%; Pred. No. 24;
    9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 CCCACCTTCT 10
    ||||| |||
Db 10 CCCACCTTCT 1

RESULT 23
BD161343
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
FEATURES
    source
        1..10
        /organism="Homo sapiens"
        /mol_type="genomic DNA"
        /db_xref="taxon:9606"
Query Match
Best Local Similarity
Matches
    42.0%; Score 8.4; DB 1; Length 10;
    90.0%; Pred. No. 24;
    9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 10 TTGGGCAGAA 19
    ||||| |||||
Db 1 TTGGGCAGAA 10
```

```
RESULT 24
BD166511/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
FEATURES
    source
        1..10
        /organism="Homo sapiens (human)"
        /mol_type="genomic DNA"
        /db_xref="taxon:32644"
Query Match
Best Local Similarity
Matches
    42.0%; Score 8.4; DB 1; Length 10;
    90.0%; Pred. No. 24;
    9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTTGGGC 15
    ||||| |||
Db 10 CTTCTTGGGC 1

RESULT 25
AR074494/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
FEATURES
    source
        1..11
        /organism="unassigned DNA"
        /mol_type="unassigned DNA"
Query Match
Best Local Similarity
Matches
    42.0%; Score 8.4; DB 1; Length 11;
    90.0%; Pred. No. 22;
    9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 CCCACCTTCT 10
    ||||| |||
Db 10 CCCACCTTCT 1
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```

RESULT 26
AR081174/c
LOCUS           AR081174           11 bp      DNA      linear      PAT 31-AUG-2000
DEFINITION      Sequence 73 from patent US 5972353.
ACCESSION       AR081174
VERSION         AR081174.1  GI:10007902
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          MN proteins, polypeptides, fusion proteins and fusion polypeptides
JOURNAL        Patent: US 5972353-A 73 26-OCT-1999;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 27
AR085371/c
LOCUS           AR085371           11 bp      DNA      linear      PAT 01-SEP-2000
DEFINITION      Sequence 73 from patent US 5981711.
ACCESSION       AR085371
VERSION         AR085371.1  GI:10012140
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          MN-specific antibodies and hybridomas
JOURNAL        Patent: US 5981711-A 73 09-NOV-1999;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 28
AR088119/c
LOCUS           AR088119           11 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION      Sequence 73 from patent US 5989838.
ACCESSION       AR088119
VERSION         AR088119.1  GI:10014882
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          Immunological methods of detecting MN proteins and MN polypeptides
JOURNAL        Patent: US 5989838-A 73 23-NOV-1999;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 29
AR104278/c
LOCUS           AR104278           11 bp      DNA      linear      PAT 14-FEB-2001
DEFINITION      Sequence 73 from patent US 6093548.
ACCESSION       AR104278
VERSION         AR104278.1  GI:12816986
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          Detection and quantitation of MN-specific antibodies
JOURNAL        Patent: US 6093548-A 73 25-JUL-2000;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 30
AR143540/c
LOCUS           AR143540           11 bp      DNA      linear      PAT 08-AUG-2001
DEFINITION      Sequence 73 from patent US 6204370.
ACCESSION       AR143540
VERSION         AR143540.1  GI:15104826
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          MN gene and protein
JOURNAL        Patent: US 6204370-A 73 20-MAR-2001;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 31
AR171446/c
LOCUS           AR171446           11 bp      DNA      linear      PAT 17-DEC-2001
DEFINITION      Sequence 73 from patent US 6297041.
ACCESSION       AR171446
VERSION         AR171446.1  GI:17910396
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          Immunological methods of detecting MN proteins and MN polypeptides
JOURNAL        Patent: US 6297041-A 73 23-NOV-1999;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"

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/mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 29
AR104278/c
LOCUS           AR104278           11 bp      DNA      linear      PAT 14-FEB-2001
DEFINITION      Sequence 73 from patent US 6093548.
ACCESSION       AR104278
VERSION         AR104278.1  GI:12816986
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          Detection and quantitation of MN-specific antibodies
JOURNAL        Patent: US 6093548-A 73 25-JUL-2000;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 30
AR143540/c
LOCUS           AR143540           11 bp      DNA      linear      PAT 08-AUG-2001
DEFINITION      Sequence 73 from patent US 6204370.
ACCESSION       AR143540
VERSION         AR143540.1  GI:15104826
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          MN gene and protein
JOURNAL        Patent: US 6204370-A 73 20-MAR-2001;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 10 CCCACTGCT 1

RESULT 31
AR171446/c
LOCUS           AR171446           11 bp      DNA      linear      PAT 17-DEC-2001
DEFINITION      Sequence 73 from patent US 6297041.
ACCESSION       AR171446
VERSION         AR171446.1  GI:17910396
KEYWORDS        .
SOURCE          Unknown.
ORGANISM        Unknown.
REFERENCE       1 (bases 1 to 11)
AUTHORS        Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE          Immunological methods of detecting MN proteins and MN polypeptides
JOURNAL        Patent: US 6297041-A 73 23-NOV-1999;
FEATURES       Location/Qualifiers
               1..11
               /organism="unknown"

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KEYWORDS      Unknown.
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 11)
AUTHORS      Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE        MN gene and protein
JOURNAL      Patent: US 6297041-A 73 02-OCT-2001;
FEATURES     Location/Qualifiers
             source
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"
Query Match  42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches      9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1 CCCACCTTCT 10
    |||||
Db   10 CCCACCTGCT 1

RESULT 32
LOCUS      AR171617/c
DEFINITION Sequence 73 from patent US 6297051.
ACCESSION  AR171617
VERSION     AR171617.1 GI:17910567
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 11)
AUTHORS   Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE     MN gene and protein
JOURNAL   Patent: US 6297051-A 73 02-OCT-2001;
FEATURES  Location/Qualifiers
             source
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"
Query Match  42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches      9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1 CCCACCTTCT 10
    |||||
Db   10 CCCACCTGCT 1

RESULT 33
LOCUS      BD243207/c
DEFINITION MN gene and protein.
ACCESSION  BD243207
VERSION     BD243207.1 GI:33052977
KEYWORDS   JP 2002528085-A/56.
SOURCE     Homo sapiens
ORGANISM   Homo sapiens
REFERENCE  1 (bases 1 to 11)
AUTHORS   Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE     MN gene and protein
JOURNAL   INSTITUTE OF VIROLOGY
COMMENT   Patent: JP 2002528085-A 56 03-SEP-2002;
          OS Homo sapiens (human)
          PN JP 2002528085-A/56
          PD 03-SEP-2002
          PP 22-OCT-1999 JP 2000578465
          PR 23-OCT-1998 US 09/177776,23-OCT-1998 US 09/178115 PI
          JAN ZAVADA, SILVIA PASTOREKOVA,JAROMIR PASTOREK PC
          C12N15/09,A61K38/00,A61K39/395,A61K48/00,A61P35/00, PC

KEYWORDS      Unknown.
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 11)
AUTHORS      Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE        MN gene and protein
JOURNAL      Patent: US 6297051-A 73 02-OCT-2001;
FEATURES     Location/Qualifiers
             source
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"
Query Match  42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches      9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1 CCCACCTTCT 10
    |||||
Db   10 CCCACCTGCT 1

RESULT 34
LOCUS      I34822/c
DEFINITION Sequence 15 from patent US 5599673.
ACCESSION  I34822
VERSION     I34822.1 GI:2087790
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 11)
AUTHORS   Keating,M.T., Curran,M.E. and Wang,Q.
TITLE     Long QT syndrome genes
JOURNAL   Patent: US 5599673-A 15 04-FEB-1997;
FEATURES  Location/Qualifiers
             source
               1..11
               /organism="unknown"
               /mol_type="unassigned DNA"
Query Match  42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches      9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  1 CCCACCTTCT 10
    |||||
Db   10 CCCACCTGCT 1

RESULT 35
LOCUS      AX412934
DEFINITION Sequence 698 from Patent WO0222675.
ACCESSION  AX412934
VERSION     AX412934.1 GI:21445392
KEYWORDS   .
SOURCE     Arabidopsis thaliana (thale cress)
ORGANISM   Arabidopsis thaliana
REFERENCE  1
AUTHORS   Glazebrook,J., Wang,X., Dangl,J.L., Eulgem,T. and Zhu,T.
TITLE     Plant genes, the expression of which are altered by pathogen
          infection
JOURNAL   Patent: WO 0222675-A 698 21-MAR-2002;
          Syngenta Participations AG (CH) ; UNIVERSITY OF NORTH CAROLINA AT
          CHAPEL HILL (US) ; Glazebrook, Jan (US) ; Wang, Xun (US) ; Dangl,
          Jeffrey L. (US) ; Eulgem, Thomas (US)
FEATURES  Location/Qualifiers
             source
               1..11
               /organism="Arabidopsis thaliana"
               /mol_type="unassigned DNA"
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/db_xref="taxon:3702"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 10 TTGGGCAGAA 19
Db 2 TTGGGCAAAA 11

RESULT 36
AX470593/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 11 CCACCTTCTT 2

RESULT 37
AX471678
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12
Db 2 CACCTTCTGG 11

RESULT 38
AX471682
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12
Db 2 CACCTTATTT 11

RESULT 39
AX623377/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12
Db 2 CACCTTATTT 11

RESULT 40
AX623396
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12
Db 11 CACCTTCTTG 2

RESULT 41
AX623396
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12
Db 2 CACCTTCTGG 11
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```

REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 437 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CCCACCTTCTT 11
        |||||
Db      2 CCACCTTCTT 1
        |||||

RESULT 41
AX623509/c
LOCUS      AX623509          11 bp      DNA          linear      PAT 21-FEB-2003
DEFINITION Sequence 550 from Patent WO02053774.
ACCESSION  AX623509
VERSION     AX623509.1  GI:28451450
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 550 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CCCACCTTCTT 10
        |||||
Db      2 CCACCTTCTT 11
        |||||

RESULT 42
AX625581/c
LOCUS      AX625581          11 bp      DNA          linear      PAT 21-FEB-2003
DEFINITION Sequence 2622 from Patent WO02053774.
ACCESSION  AX625581
VERSION     AX625581.1  GI:28453522
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 2622 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 CCACCTTCTT 11
        |||||
Db      10 CCACCTTCTT 1
        |||||

RESULT 43
AX626059
LOCUS      AX626059          11 bp      DNA          linear      PAT 21-FEB-2003
DEFINITION Sequence 3100 from Patent WO02053774.
ACCESSION  AX626059
VERSION     AX626059.1  GI:28454097
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 3100 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CCCACCTTCTT 10
        |||||
Db      2 CCCACCTTCTT 11
        |||||

RESULT 44
AX626126/c
LOCUS      AX626126          11 bp      DNA          linear      PAT 21-FEB-2003
DEFINITION Sequence 3167 from Patent WO02053774.
ACCESSION  AX626126
VERSION     AX626126.1  GI:28454164
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 3167 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CCCACCTTCTT 10
        |||||
Db      2 CCCACCTTCTT 11
        |||||

RESULT 45
AX626949
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 22;
Matches          9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CCCACCTTCTT 10
        |||||
Db      10 CCCACCTTCTT 1
        |||||

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Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11  
|||||  
Db 1 CCACCTGCTT 10

RESULT 50  
AX628191  
LOCUS AX628191 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 5232 from Patent WO02053774.  
ACCESSION AX628191  
VERSION AX628191.1 GI:28456229  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 5232 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)

FEATURES  
Location/Qualifiers  
source  
1..11  
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/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 22;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12  
|||||  
Db 2 CACCTTATTG 11

RESULT 51  
AX628263  
LOCUS AX628263 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 5304 from Patent WO02053774.  
ACCESSION AX628263  
VERSION AX628263.1 GI:28456301  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 5304 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)

FEATURES  
Location/Qualifiers  
source  
1..11  
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/mol\_type="unassigned DNA"  
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Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 22;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 10 TTGGGCAGAA 19  
|||||  
Db 2 TTGGGTAGAA 11

RESULT 52  
AX629947/c  
LOCUS AX629947 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 6988 from Patent WO02053774.

ACCESSION AX629947  
VERSION AX629947.1 GI:28457985  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 6988 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)

FEATURES  
Location/Qualifiers  
source  
1..11  
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/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 22;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 CTTCTTGGGC 15  
|||||  
Db 10 CTTCTTGTGC 1

RESULT 53  
AX630798/c  
LOCUS AX630798 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 7839 from Patent WO02053774.  
ACCESSION AX630798  
VERSION AX630798.1 GI:28458838  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 7839 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)

FEATURES  
Location/Qualifiers  
source  
1..11  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 22;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12  
|||||  
Db 11 CACCTTCTTG 2

RESULT 54  
AX630817  
LOCUS AX630817 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 7858 from Patent WO02053774.  
ACCESSION AX630817  
VERSION AX630817.1 GI:28458857  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 7858 11-JUL-2002;



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FEATURES
source
  Location/Qualifiers
    1..11
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      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACCTTCT 10
Db 2 CCGCCTTCT 11

RESULT 55
AX630930/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
    1..11
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 10 CCACCTTCTT 1

RESULT 56
AX632853
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
    1..11
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 10 CCACCTTCTT 1

RESULT 57
AX480947
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
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    1..9
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      /mol_type="genomic DNA"
      /db_xref="taxon:32630"
      /note="target"

Query Match
Best Local Similarity 40.0%; Score 8; DB 1; Length 9;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCACA 18
Db 1 TGGGCACA 8

RESULT 58
AX668629/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
    1..9
      /organism="synthetic construct"
      /mol_type="genomic DNA"
      /db_xref="taxon:32630"
      /note="example target DNA"

Query Match
Best Local Similarity 40.0%; Score 8; DB 1; Length 9;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8
Db 8 CCCACCTT 1

RESULT 59
AX668630/c
LOCUS
DEFINITION

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Henkel Kommanditgesellschaft auf Aktien (DE)
  Location/Qualifiers
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      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACCTTCT 10
Db 2 CCGCCTTCT 11

RESULT 55
AX630930/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
    1..11
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 10 CCACCTTCTT 1

RESULT 56
AX632853
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
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      /mol_type="unassigned DNA"
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Query Match
Best Local Similarity 42.0%; Score 8.4; DB 1; Length 11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 10 CCACCTTCTT 1

RESULT 57
AX480947
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
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      /organism="synthetic construct"
      /mol_type="genomic DNA"
      /db_xref="taxon:32630"
      /note="target"

Query Match
Best Local Similarity 40.0%; Score 8; DB 1; Length 9;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCACA 18
Db 1 TGGGCACA 8

RESULT 58
AX668629/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
  Location/Qualifiers
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      /mol_type="genomic DNA"
      /db_xref="taxon:32630"
      /note="example target DNA"

Query Match
Best Local Similarity 40.0%; Score 8; DB 1; Length 9;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8
Db 8 CCCACCTT 1

RESULT 59
AX668630/c
LOCUS
DEFINITION

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A15662
LOCUS       A15662               10 bp      DNA      linear      PAT 10-FEB-1994
DEFINITION  oligonucleotide.
ACCESSION   A15662
VERSION     A15662.1  GI:489794
KEYWORDS    .
SOURCE      synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 10)
AUTHORS     Verrips,C.T., Ledebroer,A.M., Edens,L., Klok,R. and Maat,J.
TITLE       DNA sequences encoding various allelic forms of mature thaumatin,
            recombinant plasmids comprising said DNA's and a process for their
            preparation, bacterial cultures comprising said recombinant
            plasmids, and method for producing mature thaumatin
JOURNAL     Patent: EP 0054330-A 4 23-JUN-1982;
            UNILEVER NV; UNILEVER PLC
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="synthetic construct"
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               /db_xref="taxon:32630"

Query Match      40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2  CCACCTTC 9
        |||||||
DB      2  CCACCTTC 9

RESULT 64
BD238780
LOCUS       BD238780               10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION  Preparation and use of superior vaccines.
ACCESSION   BD238780
VERSION     BD238780.1  GI:33048550
KEYWORDS    JP 2002534056-A/198
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 10)
AUTHORS     Roberts,B.L. and Shankara,S.
TITLE       Preparation and use of superior vaccines
JOURNAL     Patent: JP 2002534056-A 198 15-OCT-2002;
            GENZYME CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2002534056-A/198
            PD 15-OCT-2002
            PF 18-JUN-1999 JP 2000554749
            PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
            19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
            19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
            19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
            19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
            19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
            19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
            19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
            19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
            19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
            19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
            19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
            08-DEC-1998 US 60/111715
            PI BRUCE L ROBERTS, SRINIVAS SHANKARA
            PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
            C12N1/19,
            G01N37/00,
            PC C12N15/00,C12N5/00,C12N15/00
            CC Preparation and use of superior vaccines
            FT key
            Location/Qualifiers
            source
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Query Match      40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2  CCACCTTC 9
        |||||||
DB      2  CCACCTTC 9

RESULT 64
BD238780
LOCUS       BD238780               10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION  Preparation and use of superior vaccines.
ACCESSION   BD238780
VERSION     BD238780.1  GI:33048550
KEYWORDS    JP 2002534056-A/198
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 10)
AUTHORS     Roberts,B.L. and Shankara,S.
TITLE       Preparation and use of superior vaccines
JOURNAL     Patent: JP 2002534056-A 198 15-OCT-2002;
            GENZYME CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2002534056-A/198
            PD 15-OCT-2002
            PF 18-JUN-1999 JP 2000554749
            PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
            19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
            19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
            19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
            19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
            19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
            19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
            19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
            19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
            19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
            19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
            19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
            19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
            08-DEC-1998 US 60/111715
            PI BRUCE L ROBERTS, SRINIVAS SHANKARA
            PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
            C12N1/19,
            G01N37/00,
            PC C12N15/00,C12N5/00,C12N15/00
            CC Preparation and use of superior vaccines
            FT key
            Location/Qualifiers
            source
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              /mol_type="genomic DNA"
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Query Match      40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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CC      Preparation and use of superior vaccines
FH      key
FT      source
            Location/Qualifiers
            source
              1..10
              /organism="Homo sapiens"
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FEATURES    Location/Qualifiers
             source
               1..10
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               /db_xref="taxon:9606"

Query Match      40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      12 GGGCAGAA 19
        |||||||
DB      1  GGGCAGAA 8

RESULT 65
BD238878
LOCUS       BD238878               10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION  Preparation and use of superior vaccines.
ACCESSION   BD238878
VERSION     BD238878.1  GI:33048648
KEYWORDS    JP 2002534056-A/296
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 10)
AUTHORS     Roberts,B.L. and Shankara,S.
TITLE       Preparation and use of superior vaccines
JOURNAL     Patent: JP 2002534056-A 296 15-OCT-2002;
            GENZYME CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2002534056-A/296
            PD 15-OCT-2002
            PF 18-JUN-1999 JP 2000554749
            PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
            19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
            19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
            19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
            19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
            19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
            19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
            19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
            19-JUN-1998 US 60/090044,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
            19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
            19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
            19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
            08-DEC-1998 US 60/111715
            PI BRUCE L ROBERTS, SRINIVAS SHANKARA
            PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
            C12N1/19,
            G01N37/00,
            PC C12N15/00,C12N5/00,C12N15/00
            CC Preparation and use of superior vaccines
            FT key
            Location/Qualifiers
            source
              1..10
              /organism="Homo sapiens"
              /mol_type="genomic DNA"
              /db_xref="taxon:9606"

Query Match      40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      3 CACCTTCT 10
Db      2 CACCTTCT 9

RESULT 66
BD238880
LOCUS   BD238880
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD238880
VERSION   1 GI:33048650
KEYWORDS JP 2002534056-A/298.
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS  Roberts,B.L. and Shankara,S.
TITLE    Preparation and use of superior vaccines
JOURNAL  Patent: JP 2002534056-A 298 15-OCT-2002;
          GENZYME CORP
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DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239952
VERSION   BD239952.1 GI:33049722
KEYWORDS JP 2002534056-A/1370.
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
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REFERENCE
AUTHORS  Roberts,B.L. and Shankara,S.
TITLE    Preparation and use of superior vaccines
JOURNAL  Patent: JP 2002534056-A 1370 15-OCT-2002;
          GENZYME CORP
COMMENT  OS Homo sapiens (human)
        PN JP 2002534056-A/1370
        PD 15-OCT-2002
        PF 18-JUN-1999 JP 2000554749

QY      1 CCCACCTT 8
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DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239283
VERSION   BD239283.1 GI:33049053
KEYWORDS JP 2002534056-A/701.

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DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240374
VERSION BD240374.1 GI:33050144
KEYWORDS JP 2002534056-A/1792.
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE
AUTHORS Roberte,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1792 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/1792
PD 15-OCT-2002
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DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240388
VERSION BD240388.1 GI:33050158
KEYWORDS JP 2002534056-A/1806.
SOURCE Homo sapiens
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AUTHORS Roberte,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1806 15-OCT-2002;
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SOURCE Homo sapiens
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AUTHORS Roberte,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1806 15-OCT-2002;
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PN JP 2002534056-A/1806
PD 15-OCT-2002
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RESULT 75
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DEFINITION Sequence 132 from Patent WO0138577.
ACCESSION AX152217
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AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcriptomes
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AX153242/c
LOCUS AX153242 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 1157 from Patent WO0138577.
ACCESSION AX153242
VERSION AX153242.1 GI:14534893
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
REFERENCE
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcriptomes
JOURNAL Patent: WO 0138577-A 1157 31-MAY-2001;
The Johns Hopkins University (US)
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/mol_type="unassigned DNA"
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Query Match
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Qy 3 CACCTTCT 10
Db 10 CACCTTCT 3

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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 13 GGCAGAA 20
Db 9 GGCAGAA 2

RESULT 77
AX301610/c
LOCUS AX301610 10 bp DNA linear PAT 30-NOV-2001
DEFINITION Sequence 324 from Patent WO0185941.
ACCESSION AX301610
VERSION AX301610.1 GI:17382693
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
REFERENCE
AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 324 15-NOV-2001;
Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
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Query Match
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 13 GGCAGAA 20
Db 9 GGCAGAA 2

RESULT 78
BD238878/c
LOCUS BD238878 10 bp DNA linear PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD238878.1 GI:33048648
VERSION JP 2002534056-A/296.
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
REFERENCE
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 296 15-OCT-2002;
GENZYME CORP
COMMENT
OS Homo sapiens (human)
PN JP 2002534056-A/296
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
G01N37/00,

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PC C12N15/00,C12N5/00,C12N15/00
CC Preparation and use of superior vaccines
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            /db_xref="taxon:9606"

Query Match 30.0%; Score 6; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 CAGAAG 20
DB 10 CAGAAG 5

RESULT 79
BD240388
LOCUS Preparation and use of superior vaccines. 10 bp DNA linear PAT 17-JUL-2003
DEFINITION
ACCESSION BD240388
VERSION JP 2002534056-A/1806.
KEYWORDS Homo sapiens (human)
SOURCE
    ORGANISM
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
    1 (bases 1 to 10)
    Roberts,B.L. and Shankara,S.
    Preparation and use of superior vaccines
    Patent: JP 2002534056-A 1806 15-OCT-2002;
    GENZYME CORP
    OS Homo sapiens (human)
    ON JP 2002534056-A/1806
    PD 15-OCT-2002
    PF 18-JUN-1999 JP 2000554749
    PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
    19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
    19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
    19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
    19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
    19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
    19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
    19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
    19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
    19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
    19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
    19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
    19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
    19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
    08-DEC-1998 US 60/1111715
    PI BRUCE L ROBERTS,SRINIVAS SHANKARA
    PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
    C12N1/19,
    PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
    G01N37/00,
    PC C12N15/00,C12N5/00,C12N15/00
    CC Preparation and use of superior vaccines
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Query Match 30.0%; Score 6; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 CAGAAG 20
DB 10 CAGAAG 5

RESULT 80
AX153242
LOCUS Sequence 1157 from Patent WO0138577. 10 bp DNA linear PAT 22-JUN-2001
DEFINITION
ACCESSION AX153242
VERSION AX153242.1 GI:14534893
KEYWORDS Homo sapiens (human)
SOURCE
    ORGANISM
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
    1
    Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
    Human transcriptomes
    Patent: WO 0138577-A 1157 31-MAY-2001;
    The Johns Hopkins University (US)
    Location/Qualifiers
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Query Match 30.0%; Score 6; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 CAGAAG 20
DB 2 CAGAAG 7

RESULT 81
AX625163/c
LOCUS Sequence 2204 from Patent WO02053774. 11 bp DNA linear PAT 21-FEB-2003
DEFINITION
ACCESSION AX625163
VERSION AX625163.1 GI:28453104
KEYWORDS Homo sapiens (human)
SOURCE
    ORGANISM
        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
        Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
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    Petersohn,D., Conradt,M. and Hofmann,K.
    Method for determining homeostasis of the skin
    Patent: WO 02053774-A 2204 11-JUL-2002;
    Henkel Kommanditgesellschaft auf Aktien (DE)
    Location/Qualifiers
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            /db_xref="taxon:9606"

Query Match 30.0%; Score 6; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 75;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCT 10
DB 10 CCTTCT 5

RESULT 82
AX632584/c
LOCUS Sequence 9626 from Patent WO02053774. 11 bp DNA linear PAT 21-FEB-2003
DEFINITION

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ACCESSION AX632584
VERSION AX632584.1 GI:28468199
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 9626 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Best Local Similarity 100.0%; Pred. No. 75;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 5 CCTTCT 10
Db 10 CCTTCT 5
RESULT 83
AX471678/c
LOCUS AX471678 11 bp DNA linear PAT 09-AUG-2002
DEFINITION Sequence 1255 from Patent WO02053773.
ACCESSION AX471678
VERSION AX471678.1 GI:22206803
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Hofmann,K., Conradt,M. and Petersohn,D.
TITLE Method for determining skin stress or skin ageing in vitro
JOURNAL Patent: WO 02053773-A 1255 11-JUL-2002;
HENKEL KGAA (DE)
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/organism="Homo sapiens"
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Best Local Similarity 100.0%; Pred. No. 75;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 15 CAGAAG 20
Db 10 CAGAAG 5
RESULT 84
AX627792/c
LOCUS AX627792 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 4833 from Patent WO02053774.
ACCESSION AX627792
VERSION AX627792.1 GI:28455830
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 4833 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match 30.0%; Score 6; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 75;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 15 CAGAAG 20
Db 10 CAGAAG 5
RESULT 85
AX152798
LOCUS AX152798 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 713 from Patent WO0138577.
ACCESSION AX152798
VERSION AX152798.1 GI:14534449
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcriptionsomes
JOURNAL Patent: WO 0138577-A 713 31-MAY-2001;
The Johns Hopkins University (US)
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/organism="Homo sapiens"
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Query Match 27.0%; Score 5.4; DB 1; Length 10;
Best Local Similarity 85.7%; Pred. No. 1e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 14 GCAGAAG 20
Db 1 GCAGAAG 7
RESULT 86
AX301616
LOCUS AX301616 10 bp DNA linear PAT 30-NOV-2001
DEFINITION Sequence 330 from Patent WO0185941.
ACCESSION AX301616
VERSION AX301616.1 GI:17382699
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 330 15-NOV-2001;
Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
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Best Local Similarity 85.7%; Pred. No. 1e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      14 GCAGAAG 20
Db      1 GCACAG 7

RESULT 87
LOCUS   BD166511
DEFINITION Human liver disease-expressing genes.
ACCESSION BD166511
VERSION   BD166511.1 GI:27872323
KEYWORDS JP 2002209591-A/56.
SOURCE   unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Matsushima,K., Hashimoto,S., Kaneko,S. and Yamashita,T.
TITLE Human liver disease-expressing genes
JOURNAL Patent: JP 2002209591-A 56 30-JUL-2002;
JOURNAL JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT OS Homo sapiens (human)
PN JP 2002209591-A/56
PD 30-JUL-2002
PF 19-JAN-2001 JP 2001012328
PI KOJI MATSUSHIMA, SHINICHI HASHIMOTO, SHUICHI KANEKO, TARO PI
YAMASHITA
PC C12N15/09, C07K14/47, C07K16/18, G01N33/15, G01N33/50//C12P21/02,
PC C12P21/08,
PC C12N15/00
CC Human liver disease-expressing genes
FH Key Location/Qualifiers
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/db_xref="taxon:32644"

Query Match 27.0%; Score 5.4; DB 1; Length 10;
Best Local Similarity 85.7%; Pred. No. 1e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      14 GCAGAAG 20
Db      1 GCACAG 7

RESULT 88
BD239952/c
LOCUS   BD239952
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239952
VERSION   BD239952.1 GI:33049722
KEYWORDS JP 2002534056-A/1370.
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Roberts,B.I. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1370 15-OCT-2002;
JOURNAL GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/1370
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039, 19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041, 19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997, 19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035, 19-JUN-1998 US 60/089993 PR
19-JUN-1998 US 60/089992, 19-JUN-1998 US 60/090072 PR

QY      14 GCAGAAG 20
Db      1 GCACAG 7

RESULT 89
AX629947
LOCUS   AX629947
DEFINITION Sequence 6988 from Patent WO02053774.
ACCESSION AX629947
VERSION   AX629947.1 GI:28457985
KEYWORDS
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 6988 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)

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Best Local Similarity 85.7%; Pred. No. 94;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      14 GCAGAAG 20
Db      1 GCACAG 7

RESULT 90
AX626949/c
LOCUS   AX626949
DEFINITION Sequence 3990 from Patent WO02053774.
ACCESSION AX626949
VERSION   AX626949.1 GI:28454987
KEYWORDS

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19-JUN-1998 US 60/089878, 19-JUN-1998 US 60/089991 PR
19-JUN-1998 US 60/090000, 19-JUN-1998 US 60/090048 PR
19-JUN-1998 US 60/089999, 19-JUN-1998 US 60/090043 PR
19-JUN-1998 US 60/090042, 19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044, 19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080, 19-JUN-1998 US 60/089833 PR
19-JUN-1998 US 60/089994, 19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090078, 19-JUN-1998 US 60/090047 PR
19-JUN-1998 US 60/090076, 19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS, SRINIVAS SHANKARA
PC C12N15/09, C12N15/00, A61K39/00, A61P35/00, A61P37/04, C12N1/15, PC
C12N1/19,
PC C12N1/21, C12N5/10, G01N33/15, G01N33/50, G01N33/53, G01N33/566, PC
G01N37/00
PC C12N15/00, C12N5/00, C12N15/00
CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
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FT /organism='Homo sapiens (human)'.

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/db_xref="taxon:9606"

Query Match 27.0%; Score 5.4; DB 1; Length 10;
Best Local Similarity 85.7%; Pred. No. 1e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      4 ACCTTCT 10
Db      10 ATCTTCT 4

RESULT 89
AX629947
LOCUS   AX629947
DEFINITION Sequence 6988 from Patent WO02053774.
ACCESSION AX629947
VERSION   AX629947.1 GI:28457985
KEYWORDS
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 6988 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)

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Query Match 27.0%; Score 5.4; DB 1; Length 11;
Best Local Similarity 85.7%; Pred. No. 94;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      14 GCAGAAG 20
Db      1 GCACAG 7

RESULT 90
AX626949/c
LOCUS   AX626949
DEFINITION Sequence 3990 from Patent WO02053774.
ACCESSION AX626949
VERSION   AX626949.1 GI:28454987
KEYWORDS

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SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 3990 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match      26.0%; Score 5.2; DB 1; Length 11;
Best Local Similarity 70.0%; Pred. No. 1e+02;
Matches          7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      7 TTCTTGGGCA 16
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Db       11 TTCTTGGCCA 2

RESULT 91
LOCUS     AX627089
DEFINITION Sequence 4130 from Patent WO02053774.
ACCESSION AX627089
VERSION   AX627089.1 GI:28455127
KEYWORDS
SOURCE    Homo sapiens (human)
ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 4130 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match      26.0%; Score 5.2; DB 1; Length 11;
Best Local Similarity 70.0%; Pred. No. 1e+02;
Matches          7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      10 TTGGGCAGAA 19
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Db       1 TTGCCCAAA 10

RESULT 92
LOCUS     AX632853/c
DEFINITION Sequence 9895 from Patent WO02053774.
ACCESSION AX632853
VERSION   AX632853.1 GI:28468468
KEYWORDS
SOURCE    Homo sapiens (human)
ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 9895 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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Matches          7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      11 TGGGCAGAAG 20
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Db       11 TGTGCCCAAG 2

RESULT 93
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DEFINITION Sequence 2078 from Patent WO0242459.
ACCESSION AX668629
VERSION   AX668629.1 GI:29291602
KEYWORDS
SOURCE    synthetic construct
            synthetic construct
            artificial sequences.
REFERENCE   1
AUTHORS     Liu,Q.
TITLE       Position dependent recognition of gnn nucleotide triplets by zinc
            fingers
JOURNAL     Patent: WO 0242459-A 2078 30-MAY-2002;
            Sangamo Biosciences Inc. (US)
FEATURES    Location/Qualifiers
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              /mol_type="genomic DNA"
              /db_xref="taxon:32630"
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Query Match      25.0%; Score 5; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches          5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      11 TGGGC 15
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RESULT 94
LOCUS     AX668630
DEFINITION Sequence 2079 from Patent WO0242459.
ACCESSION AX668630
VERSION   AX668630.1 GI:29291603
KEYWORDS
SOURCE    synthetic construct
            synthetic construct
            artificial sequences.
REFERENCE   1
AUTHORS     Liu,Q.
TITLE       Position dependent recognition of gnn nucleotide triplets by zinc
            fingers
JOURNAL     Patent: WO 0242459-A 2079 30-MAY-2002;
            Sangamo Biosciences Inc. (US)
FEATURES    Location/Qualifiers
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              /db_xref="taxon:32630"
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Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches          5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      11 TGGGC 15
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Db       5 TGGGC 9

RESULT 95
LOCUS     AX668630
DEFINITION Sequence 2079 from Patent WO0242459.
ACCESSION AX668630
VERSION   AX668630.1 GI:29291603
KEYWORDS
SOURCE    synthetic construct
            synthetic construct
            artificial sequences.
REFERENCE   1
AUTHORS     Liu,Q.
TITLE       Position dependent recognition of gnn nucleotide triplets by zinc
            fingers
JOURNAL     Patent: WO 0242459-A 2079 30-MAY-2002;
            Sangamo Biosciences Inc. (US)
FEATURES    Location/Qualifiers
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Matches          5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      11 TGGGC 15
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19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/08997,19-JUN-1998 US 60/090079 PR
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19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
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19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
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G01N37/00,
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QY 6 CTTCT 10
Db 2 CTTCT 6

RESULT 99
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LOCUS 10 bp DNA linear PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240374
VERSION BD240374.1 GI:33050144
KEYWORDS JP 2002534056-A/1792.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 10)
Robert, B.L. and Shankara, S.
Preparation and use of superior vaccines
PATENT: JP 2002534056-A 1792 15-OCT-2002;
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PD 15-OCT-2002
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19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089933 PR
19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
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Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CTTCT 10
Db 2 CTTCT 6

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I19168
LOCUS 10 bp DNA linear PAT 07-OCT-1996
DEFINITION Sequence 31 from patent US 5502176.
ACCESSION I19168
VERSION I19168.1 GI:1599523
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Tenen,D.G., Pahl,H.L. and Burn,T.C.
TITLE Myeloid cell specific promoter
JOURNAL Patent: US 5502176-A 31 26-MAR-1996;
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Query Match 25.0%; Score 5; DB 1; Length 10;
Best Local Similarity 100.0%; Pred.No.1.2e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CTTCT 10
Db 1 CTTCT 5

RESULT 101
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LOCUS 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 132 from Patent WO0138577.
ACCESSION AX152217
VERSION AX152217.1 GI:14533868
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
Vclulescu,V.E., Vogelestein,B. and Kinzler,K.W.
Human transcripts
PATENT: WO 0138577-A 132 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)

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19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
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CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
FT source 1..10
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Best Local Similarity 100.0%; Pred.No.1.2e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGAAG 20
Db 6 AGAAG 2

RESULT 100
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DEFINITION Sequence 31 from patent US 5502176.
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VERSION I19168.1 GI:1599523
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ORGANISM Unclassified.
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AUTHORS Tenen,D.G., Pahl,H.L. and Burn,T.C.
TITLE Myeloid cell specific promoter
JOURNAL Patent: US 5502176-A 31 26-MAR-1996;
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QY 6 CTTCT 10
Db 1 CTTCT 5

RESULT 101
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
Vclulescu,V.E., Vogelestein,B. and Kinzler,K.W.
Human transcripts
PATENT: WO 0138577-A 132 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)

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    6 AGAAG 2

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    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

  REFERENCE
    1
    AUTHORS
    Versteeg,R. and Caron,H.N.
    TITLE
    MYC targets
    JOURNAL
    Patent: WO 0185941-A 324 15-NOV-2001;
    Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)

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    |||||
    2 CTCTCT 6

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    VERSION
    AX623364.1 GI:28451305
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    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

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    AUTHORS
    Petersohn,D., Conradt,M. and Hofmann,K.
    TITLE
    Method for determining homeostasis of the skin
    JOURNAL
    Patent: WO 02053774-A 405 11-JUL-2002;
    Henkel Kommanditgesellschaft auf Aktien (DE)

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    7 AGAAG 3

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    ORGANISM
    Unclassified.

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    AUTHORS
    Baric,R.S. and Yount,B.
    TITLE
    Directional assembly of large viral genomes and chromosomes
    JOURNAL
    Patent: US 6593111-A 15 15-JUL-2003;
    Location/Qualifiers

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    ACCESSION
    AX630785
    VERSION
    AX630785.1 GI:28458825
    KEYWORDS
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    ORGANISM
    Homo sapiens
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

  REFERENCE
    1
    AUTHORS
    Petersohn,D., Conradt,M. and Hofmann,K.
    TITLE
    Method for determining homeostasis of the skin
    JOURNAL
    Patent: WO 02053774-A 7826 11-JUL-2002;
    Henkel Kommanditgesellschaft auf Aktien (DE)

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    |||||
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    1 (bases 1 to 11)
    AUTHORS
    Baric,R.S. and Yount,B.
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    Directional assembly of large viral genomes and chromosomes
    JOURNAL
    Patent: US 6593111-A 15 15-JUL-2003;
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  QY
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    |||||
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    ORGANISM
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    Unclassified.
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REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE Method of inhibiting tumor growth using antibodies to MN protein
JOURNAL Patent: US 595075-A 73 21-SEP-1999;
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Query Match      25.0%; Score 5; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGC 15
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Db 7 TGGGC 11

RESULT 107
AR081174
LOCUS AR081174 11 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 73 from patent US 5972353.
ACCESSION AR081174
VERSION AR081174.1 GI:10007902
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE MN proteins, polypeptides, fusion proteins and fusion polypeptides
JOURNAL Patent: US 5972353-A 73 26-OCT-1999;
FEATURES
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Query Match      25.0%; Score 5; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGC 15
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Db 7 TGGGC 11

RESULT 108
AR085371
LOCUS AR085371 11 bp DNA linear PAT 01-SEP-2000
DEFINITION Sequence 73 from patent US 5981711.
ACCESSION AR085371
VERSION AR085371.1 GI:10012140
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE MN-specific antibodies and hybridomas
JOURNAL Patent: US 5981711-A 73 09-NOV-1999;
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Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGC 15
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RESULT 109
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LOCUS AR088119 11 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 73 from patent US 5989838.
ACCESSION AR088119
VERSION AR088119.1 GI:10014882
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE Immunological methods of detecting MN proteins and MN polypeptides
JOURNAL Patent: US 5989838-A 73 23-NOV-1999;
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Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGC 15
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Db 7 TGGGC 11

RESULT 110
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LOCUS AR104278 11 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 73 from patent US 6093548.
ACCESSION AR104278
VERSION AR104278.1 GI:12816986
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE Detection and quantitation of MN-specific antibodies
JOURNAL Patent: US 6093548-A 73 25-JUL-2000;
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Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGC 15
    |||||
Db 7 TGGGC 11

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LOCUS AR143540 11 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 73 from patent US 6204370.
ACCESSION AR143540
VERSION AR143540.1 GI:15104826
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 11)
AUTHORS Zavada,J., Pastorekova,S. and Pastorek,J.
TITLE MN gene and protein
JOURNAL Patent: US 6204370-A 73 20-MAR-2001;
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            /mol_type="unassigned DNA"
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Db	7 TGGGC 11 		
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DEFINITION	Sequence 73 from patent US 6297041.		linear
ACCESSION	AR171446		
VERSION	AR171446.1	GI:17910396	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 11)		
AUTHORS	Zavada,J., Pastorekova,S. and Pastorek,J.		
TITLE	MN gene and protein		
JOURNAL	Patent: US 6297041-A 73 02-OCT-2001;		
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Qy	11 TGGGC 15 		
Db	7 TGGGC 11 		
RESULT 113			
LOCUS	AR171617	11 bp	DNA
DEFINITION	Sequence 73 from patent US 6297051.		linear
ACCESSION	AR171617		
VERSION	AR171617.1	GI:17910567	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 11)		
AUTHORS	Zavada,J., Pastorekova,S. and Pastorek,J.		
TITLE	MN gene and protein		
JOURNAL	Patent: US 6297051-A 73 02-OCT-2001;		
FEATURES	Location/Qualifiers		
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Query Match 25.0%; Score 5; DB 1; Length 11; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
Qy	11 TGGGC 15 		
Db	7 TGGGC 11 		
RESULT 114			
LOCUS	BD243207	11 bp	DNA
DEFINITION	MN gene and protein.		linear
ACCESSION	BD243207		
VERSION			
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 11)		
AUTHORS	Zavada,J., Pastorekova,S. and Pastorek,J.		
TITLE	MN gene and protein		
JOURNAL	Patent: US 6297051-A 73 02-OCT-2001;		
FEATURES	Location/Qualifiers		
source	1..11		
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Qy	11 TGGGC 15 		
Db	7 TGGGC 11 		
RESULT 115			
LOCUS	AX623396/c	11 bp	DNA
DEFINITION	Sequence 437 from Patent WO02053774.		linear
ACCESSION	AX623396		
VERSION	AX623396.1	GI:28451337	
KEYWORDS			
SOURCE	Homo sapiens (human)		
ORGANISM	Homo sapiens		
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.		
REFERENCE	1		
AUTHORS	Petersohn,D., Conradt,M. and Hofmann,K.		
TITLE	Method for determining homeostasis of the skin		
JOURNAL	Patent: WO 02053774-A 437 11-JUL-2002;		
FEATURES	Henkel Kommanditgesellschaft auf Aktien (DE)		
source	Location/Qualifiers		
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	/mol_type="unassigned DNA"		
	/db_xref="taxon:9606"		
Query Match 25.0%; Score 5; DB 1; Length 11; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
Qy	16 AGAAG 20 		
Db	11 AGAAG 7 		
RESULT 116			
LOCUS	AX630817/c	11 bp	DNA
DEFINITION	MN gene and protein.		linear
ACCESSION	AX630817		
VERSION			
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 11)		
AUTHORS	Zavada,J., Pastorekova,S. and Pastorek,J.		
TITLE	MN gene and protein		
JOURNAL	Patent: US 6297051-A 73 02-OCT-2001;		
FEATURES	Location/Qualifiers		
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Qy	11 TGGGC 15 		
Db	7 TGGGC 11 		
RESULT 117			
LOCUS	AX630817/c	11 bp	DNA
DEFINITION	MN gene and protein.		linear
ACCESSION	AX630817		
VERSION			
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 11)		
AUTHORS	Zavada,J., Pastorekova,S. and Pastorek,J.		
TITLE	MN gene and protein		
JOURNAL	Patent: US 6297051-A 73 02-OCT-2001;		
FEATURES	Location/Qualifiers		
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Qy	11 TGGGC 15 		



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DEFINITION Sequence 7858 from Patent WO02053774.
ACCESSION AX630817
VERSION AX630817.1 GI:28458857
KEYWORDS Homo sapiens (human)
SOURCE
ORGANISM Homo sapiens
REFERENCE
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 7858 11-JUL-2002;
          Henkel Kommanditgesellschaft auf Aktien (DE)
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Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 16 AGAAG 20
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Db 11 AGAAG 7
RESULT 117
BD061440/c
LOCUS BD061440 15 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for selectively separating living cell expressed with
specific gene.
ACCESSION BD061440
VERSION BD061440.1 GI:22607046
KEYWORDS JP 2001286285-A/2.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 15)
AUTHORS Iehibashi,K. and Teuji,A.
TITLE Method for selectively separating living cell expressed with
specific gene
JOURNAL Patent: JP 2001286285-A 2 16-OCT-2001;
          LABORATORY OF MOLECULAR BIOPHOTONICS
COMMENT PN JP 2001286285-A/2
PF 16-OCT-2001
PI 28-APR-2000 JP 2000130793
PC KANAME ISHIBASHI,AKIHIKO TSUJI
PC C12N15/09,C12N1/02,C12N5/10,C12Q1/68,G01N33/48,G01N33/53, PC
G01N33/566.
PC G01N33/58/(C12N1/02,C12R1:91), (C12Q1/68,C12R1:91),C12N15/00,
PC C12N5/00
CC Probe
FH Key Location/Qualifiers
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Query Match 25.0%; Score 5; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 16 AGAAG 20
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Db 8 AGAAG 4
RESULT 118
AX412934/c
LOCUS AX412934 11 bp DNA linear PAT 14-JUN-2002
DEFINITION Sequence 698 from Patent WO0222675.
ACCESSION AX412934
VERSION AX412934.1 GI:21445392
KEYWORDS Arabidopsis thaliana (thale cress)
SOURCE
ORGANISM Arabidopsis thaliana
REFERENCE
AUTHORS Glazebrook,J., Wang,X., Dangl,J.L., Eulgem,T. and Zhu,T.
TITLE Plant genes, the expression of which are altered by pathogen
infection
JOURNAL Patent: WO 0222675-A 698 21-MAR-2002;
          Syngenta Participations AG (CH); UNIVERSITY OF NORTH CAROLINA AT
          CHAPEL HILL (US); Glazebrook, Jan (US); Wang, Xun (US); Dangl,
          Jeffrey L. (US); Eulgem, Thomas (US)
          Jeffrey L. (US); Eulgem, Thomas (US)
          Location/Qualifiers
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Best Local Similarity 63.6%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 8 TCTTGGCAGA 18
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Db 11 TTTTGCCCAA 1
RESULT 119
BD161343/c
LOCUS BD161343 10 bp DNA linear PAT 17-JAN-2003
DEFINITION Human activated Th1 and Th2 cell expression genes.
ACCESSION BD161343
VERSION BD161343.1 GI:27867101
KEYWORDS JP 2002186482-A/165.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 10)
AUTHORS Nagai,S., Matsushima,K. and Hashimoto,S.
TITLE Human activated Th1 and Th2 cell expression genes
JOURNAL Patent: JP 2002186482-A 165 02-JUL-2002;
          JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT OS Homo sapiens (human)
PN JP 2002186482-A/165
PD 02-JUL-2002
PF 19-DEC-2000 JP 2000385816
PI SHIGENORI NAGAI,KOJI MATSUSHIMA,SHINICHI HASHIMOTO PC
C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
activated Th1 and Th2 cell expression genes FH Key
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Best Local Similarity 83.3%; Pred. No. 1.3e+02;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 7 TTCTTG 12
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Db 10 TTCTGG 5
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RESULT 120  
AX628263/c  
LOCUS AX628263 11 bp DNA linear PAT 21-FEB-2003  
DEFINITION Sequence 5304 from Patent WO02053774.  
ACCESSION AX628263  
VERSION AX628263.1 GI:28456301  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.  
TITLE Method for determining homeostasis of the skin  
JOURNAL Patent: WO 02053774-A 5304 11-JUL-2002;  
Henkel Kommanditgesellschaft auf Aktien (DE)  
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source Location/Qualifiers  
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Best Local Similarity 83.3%; Pred. No. 1.2e+02;  
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 CCCACC 6  
Db 6 CCCAAC 1  
RESULT 121  
AR349259/c  
LOCUS AR349259 12 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 6 from patent US 6583986.  
ACCESSION AR349259  
VERSION AR349259.1 GI:33749984  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 12)  
AUTHORS Storti,W.J., Sibley,K., Ovadia,S., Kimball,S. and Falvo,B.  
TITLE Method and apparatus for managing thermal energy emissions  
JOURNAL Patent: US 6583986-A 6 24-JUN-2003;  
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source Location/Qualifiers  
1..12  
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Query Match 21.0%; Score 4.2; DB 1; Length 12;  
Best Local Similarity 66.7%; Pred. No. 1.1e+02;  
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 12 GGGCAGAG 20  
Db 12 GAGCCCAAG 4  
RESULT 122  
AR349261/c  
LOCUS AR349261 12 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 8 from patent US 6583986.  
ACCESSION AR349261  
VERSION AR349261.1 GI:33749986  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 12)  
AUTHORS Storti,W.J., Sibley,K., Ovadia,S., Kimball,S. and Falvo,B.  
TITLE Method and apparatus for managing thermal energy emissions

JOURNAL Patent: US 6583986-A 8 24-JUN-2003;  
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Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 12 GGGCAGAG 20  
Db 12 GAGCCCAAG 4  
RESULT 123  
AX480947/c  
LOCUS AX480947 9 bp DNA linear PAT 12-AUG-2002  
DEFINITION Sequence 7 from Patent WO0246412.  
ACCESSION AX480947  
VERSION AX480947.1 GI:22217586  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1  
AUTHORS Rebar,E., Jamieson,A., Liu,Q., Liu,P.Q., Wolffe,A., Eisenberg,S.P. and Jarvis,E.  
TITLE Regulation of angiogenesis with zinc finger proteins  
JOURNAL Patent: WO 0246412-A 7 13-JUN-2002;  
Sangamo Biosciences Inc. (US)  
FEATURES  
source Location/Qualifiers  
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Query Match 20.0%; Score 4; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCCA 4  
Db 4 CCCCA 1  
RESULT 124  
AB012724/c  
LOCUS AB012724 9 bp DNA linear PRI 30-JUN-1998  
DEFINITION Homo sapiens gene for endothelin-A receptor, cis\_element region.  
ACCESSION AB012724  
VERSION AB012724.1 GI:3273319  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1 (sites)  
AUTHORS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
Hosoda,K., Nakao,K., Tamura,N., Arai,H., Ogawa,Y., Suga,S., Nakanishi,S. and Imura,H.  
TITLE Organization, structure, chromosomal assignment, and expression of the gene encoding the human endothelin-A receptor  
JOURNAL J. Biol. Chem. 267 (26), 18797-18804 (1992)  
MEDLINE 92406798  
PUBMED 1326535  
REFERENCE 2 (sites)  
AUTHORS Yamashita,J., Yoshimasa,T., Arai,H., Hiraoka,J., Takaya,K., Miyamoto,Y., Ogawa,Y., Itoh,H. and Nakao,K.  
TITLE Identification of cis-elements of the human endothelin-A receptor gene and inhibition of the gene expression by the decoy strategy  
JOURNAL J. Biol. Chem. 273 (26), 15993-15999 (1998)  
MEDLINE 98298101

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PUBMED 9632648
REFERENCE 3 (bases 1 to 9)
AUTHORS Yamashita,J., Yoshimasa,T., Arai,H., Itoh,H. and Nakao,K.
TITLE Direct Submission
JOURNAL Submitted (02-APR-1998) Jun Yamashita, Kyoto University Graduate
School of Medicine, Department of Medicine and Clinical Science, 54
Shogoin Kawahara-cho, Sakyo-ku, Kyoto, Kyoto 606, Japan
(E-mail:juny@kuhp.kyoto-u.ac.jp, Tel:81-75-751-3170,
Fax:81-75-771-9452)
FEATURES
Location/Qualifiers
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gene"

Query Match 20.0%; Score 4; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGG 14
Db 5 TGGG 2

RESULT 125
BD238992 10 bp DNA linear PAT 17-JUL-2003
LOCUS BD238992
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD238992
VERSION BD238992.1 GI:33048762
KEYWORDS JP 2002534056-A/410.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 410 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/410
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
C12N1/19,
G01N37/00,
G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
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Qy 7 TTCT 10
Db 2 TTCT 5

RESULT 126
BD239512 10 bp DNA linear PAT 17-JUL-2003
LOCUS BD239512
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239512
VERSION BD239512.1 GI:33049282
KEYWORDS JP 2002534056-A/930.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 930 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/930
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
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PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
C12N1/19,
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G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
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PC C12N15/00,C12N5/00,C12N15/00
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Query Match 20.0%; Score 4; DB 1; Length 10;
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Qy 7 TTCT 10
Db 2 TTCT 5

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Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GAAG 20
Db 1 GAAG 4

RESULT 126
BD239512 10 bp DNA linear PAT 17-JUL-2003
LOCUS BD239512
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239512
VERSION BD239512.1 GI:33049282
KEYWORDS JP 2002534056-A/930.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 930 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/930
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
C12N1/19,
G01N37/00,
G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
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PC C12N15/00,C12N5/00,C12N15/00
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Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 TTCT 10
Db 2 TTCT 5

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RESULT 127
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LOCUS          A92569          10 bp      DNA          linear      PAT 22-JAN-2000
DEFINITION     Sequence 10 from Patent WO9812320.
ACCESSION      A92569
VERSION        A92569.1  GI:6741228
KEYWORDS       'unidentified
SOURCE         unidentified
ORGANISM       unclassified.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Stocklin,E. and Groner,B.
TITLE          NUCLEIC ACID CONSTRUCT CODING FOR A PROTEIN COMPLEX FROM A STAT
JOURNAL        PROTEIN AND A NUCLEAR RECEPTOR AND ITS USE
                Patent: WO 9812320-A 10 26-MAR-1998;
                STOCKLIN ELISABETH (CH); GRONER BERND (CH)
FEATURES       Location/Qualifiers
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                /organism="unidentified"
                /mol_type="unassigned DNA"
                /db_xref="taxon:32644"
Query Match    20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCA 4
Db 3 CCCA 6

RESULT 128
AR043677
LOCUS          AR043677          10 bp      DNA          linear      PAT 29-SEP-1999
DEFINITION     Sequence 47 from patent US 5814517.
ACCESSION      AR043677
VERSION        AR043677.1  GI:5964685
KEYWORDS       'Unknown.
SOURCE         'Unknown.
ORGANISM       'Unclassified.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Seidel,H.Martin. and Lamb,I.Peter.
TITLE          DNA spacer regulatory elements responsive to cytokines and methods
                for their use
JOURNAL        Patent: US 5814517-A 47 29-SEP-1998;
FEATURES       Location/Qualifiers
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                /mol_type="unassigned DNA"
Query Match    20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCA 4
Db 3 CCCA 6

RESULT 129
BD238844/c
LOCUS          BD238844          10 bp      DNA          linear      PAT 17-JUL-2003
DEFINITION     Preparation and use of superior vaccines.
ACCESSION      BD238844
VERSION        BD238844.1  GI:33048614
KEYWORDS       JP 2002534056-A/262.
SOURCE         Homo sapiens (human)
ORGANISM       Homo sapiens
                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1 (bases 1 to 10)
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AUTHORS        Roberts,B.L. and Shankara,S.
TITLE          Preparation and use of superior vaccines
JOURNAL        Patent: JP 2002534056-A 262 15-OCT-2002;
                GENZYME CORP
COMMENT        OS Homo sapiens (human)
                PN JP 2002534056-A/262
                PD 15-OCT-2002
                PF 18-JUN-1999 JP 2000554749
                PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
                19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
                19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
                19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
                19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
                19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
                19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
                19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
                19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
                19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
                19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
                19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
                19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
                19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
                08-DEC-1998 US 60/111715
                PI BRUCE L ROBERTS,SRINIVAS SHANKARA
                PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
                C12N1/19,
                PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
                G01N37/00,
                PC C12N15/00,C12N5/00,C12N15/00
                CC Preparation and use of superior vaccines
                FH Key
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FEATURES       Location/Qualifiers
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                /db_xref="taxon:9606"
Query Match    20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCA 4
Db 8 CCCA 5

RESULT 130
BD239019/c
LOCUS          BD239019          10 bp      DNA          linear      PAT 17-JUL-2003
DEFINITION     Preparation and use of superior vaccines.
ACCESSION      BD239019
VERSION        BD239019.1  GI:33048789
KEYWORDS       JP 2002534056-A/437.
SOURCE         Homo sapiens (human)
ORGANISM       Homo sapiens
                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Roberts,B.L. and Shankara,S.
TITLE          Preparation and use of superior vaccines
JOURNAL        Patent: JP 2002534056-A 437 15-OCT-2002;
                GENZYME CORP
COMMENT        OS Homo sapiens (human)
                PN JP 2002534056-A/437
                PD 15-OCT-2002
                PF 18-JUN-1999 JP 2000554749
                PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
                19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
                19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
                19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
                19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
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19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS, SRINIVAS SHANKARA
PC C12N1/09, C12N15/09, A61K39/00, A61P35/00, A61P37/04, C12N1/15, PC
C12N1/19,
PC C12N1/21, C12N5/10, G01N33/15, G01N33/50, G01N33/53, G01N33/566, PC
G01N37/00,
PC C12N15/00, C12N5/00, C12N15/00
CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
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/db_xref='taxon:9606'

Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 GCAG 17
DB 8 GCAG 5

RESULT 131
BD240663
LOCUS BD240663 10 bp DNA linear PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240663
VERSION BD240663.1 GI:33050433
KEYWORDS JP 2002534056-A/2081.
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE
AUTHORS Roberts, B.L. and Shankara, S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 2081 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/2081
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089933 PR
19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS, SRINIVAS SHANKARA
PC C12N15/09, C12N15/09, A61K39/00, A61P35/00, A61P37/04, C12N1/15, PC
C12N1/19,

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PC C12N1/21, C12N5/10, G01N33/15, G01N33/50, G01N33/53, G01N33/566, PC
G01N37/00,
PC C12N15/00, C12N5/00, C12N15/00
CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
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/db_xref='taxon:9606'

Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGG 14
DB 7 TGGG 10

RESULT 132
AX374630/c
LOCUS AX374630 10 bp DNA linear PAT 01-MAR-2002
DEFINITION Sequence 51 from Patent WO0210454.
ACCESSION AX374630
VERSION AX374630.1 GI:19169527
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE
AUTHORS Choi, J.Y., Koshiy, B., Kliem, S. and Stephens, J.C.
TITLE Haplotypes of the alas2 gene
JOURNAL Patent: WO 0210454-A 51 07-FEB-2002;
GENAissance Pharmaceuticals, Inc. (US)
FEATURES
source
1..10
/organism='Homo sapiens'
/mol_type='unassigned DNA'
/db_xref='taxon:9606'

Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCA 4
DB 9 CCCA 6

RESULT 133
AX805907
LOCUS AX805907 10 bp DNA linear PAT 25-NOV-2003
DEFINITION Sequence 53 from Patent WO03060163.
ACCESSION AX805907
VERSION AX805907.1 GI:38522818
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE
AUTHORS van Eijk, M.J. and van Schaik, C.
TITLE Discrimination and detection of target nucleotide sequences using mass spectrometry
JOURNAL Patent: WO 03060163-A 53 24-JUL-2003;
KEYGENE N.V. (NL)
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/organism='synthetic construct'
/mol_type='unassigned DNA'

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CC Preparation and use of superior vaccines
FH Key Location/Qualifiers
FT source 1..10
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       Location/Qualifiers
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Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGG 14
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Db 6 TGGG 3

RESULT 137
BD240561
LOCUS BD240561.1 GI:33050331
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240561
VERSION BD240561.1
KEYWORDS JP 2002534056-A/1979.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 (bases 1 to 10)
  Roberts,B.L. and Shankara,S.
  Preparation and use of superior vaccines
  Patent: JP 2002534056-A 1979 15-OCT-2002;
  GENZYME CORP
COMMENT
  OS Homo sapiens (human)
  PN JP 2002534056-A/1979
  PD 15-OCT-2002
  PF 18-JUN-1999 JP 2000554749
  PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
  19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
  19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
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  19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
  08-DEC-1998 US 60/111715
  PI BRUCE L ROBERTS,SRINIVAS SHANKARA
  PC C12N15/09,C12N15/05,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
  C12N1/19,
  PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
  G01N37/00,
  PC C12N15/00,C12N5/00,C12N15/00
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Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 GAAG 20
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Db 2 GAAG 5

RESULT 138
I19170
LOCUS I19170
DEFINITION Sequence 33 from patent US 5502176.
ACCESSION I19170
VERSION I19170.1 GI:1599525
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
  1 (bases 1 to 10)
  Tenen,D.G., Fahl,H.L. and Burn,T.C.
  Myeloid cell specific promoter
  Patent: US 5502176-A 33 26-MAR-1996;
  Location/Qualifiers
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  /organism="unknown"
  /mol_type="unassigned DNA"
Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCT 10
   ||||
Db 3 TTCT 6

RESULT 139
AR303345
LOCUS AR303345
DEFINITION Sequence 70 from patent US 6544736.
ACCESSION AR303345
VERSION AR303345.1 GI:31692121
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
  1 (bases 1 to 10)
  Shimamoto,A., Furuichi,Y., Shibata,Y., Funaki,H., Ohara,E. and
  Watahiki,M.
  Method for synthesizing cDNA from mRNA sample
  Patent: US 6544736-A 70 08-APR-2003;
  Location/Qualifiers
  1..10
  /organism="unknown"
  /mol_type="genomic DNA"
Query Match 20.0%; Score 4; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCT 10
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Db 3 TTCT 6

RESULT 140
I34822
LOCUS I34822
DEFINITION Sequence 15 from patent US 5599673.
ACCESSION I34822
VERSION I34822.1 GI:2087790
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
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REFERENCE 1 (bases 1 to 11)
AUTHORS Keating,M.T., Curran,M.E. and Wang,Q.
TITLE Long QT syndrome genes
JOURNAL Patent: US 5599673-A 15 04-FEB-1997;
FEATURES
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Query Match
Best Local Similarity 20.0%; Score 4; DB 1; Length 11;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGG 14
Db 7 TGGG 10

RESULT 141
AX470593
LOCUS AX470593 11 bp DNA linear PAT 09-AUG-2002
DEFINITION Sequence 170 from Patent WO02053773.
ACCESSION AX470593
VERSION AX470593.1 GI:22205718
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Hofmann,K., Conradt,M. and Petersohn,D.
TITLE Method for determining skin stress or skin ageing in vitro
JOURNAL Patent: WO 02053773-A 170 11-JUL-2002;
FEATURES
    source
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Query Match
Best Local Similarity 20.0%; Score 4; DB 1; Length 11;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGAA 19
Db 3 AGAA 6

RESULT 142
AX623377
LOCUS AX623377 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 418 from Patent WO02053774.
ACCESSION AX623377
VERSION AX623377.1 GI:28451318
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 418 11-JUL-2002;
FEATURES
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        1. .11
            Location/Qualifiers
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                /mol_type="unassigned DNA"
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Query Match
Best Local Similarity 20.0%; Score 4; DB 1; Length 11;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGG 14
Db 7 TGGG 10

RESULT 143
AX626059/c
LOCUS AX626059 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 3100 from Patent WO02053774.
ACCESSION AX626059
VERSION AX626059.1 GI:28454097
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 3100 11-JUL-2002;
FEATURES
    source
        1. .11
            Location/Qualifiers
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                /mol_type="unassigned DNA"
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Query Match
Best Local Similarity 20.0%; Score 4; DB 1; Length 11;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGAA 19
Db 11 AGAA 8

RESULT 144
AX626126
LOCUS AX626126 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 3167 from Patent WO02053774.
ACCESSION AX626126
VERSION AX626126.1 GI:28454164
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 3167 11-JUL-2002;
FEATURES
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Query Match
Best Local Similarity 20.0%; Score 4; DB 1; Length 11;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGG 14
Db 7 TGGG 10

RESULT 145
AX627751
LOCUS AX627751 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 4792 from Patent WO02053774.
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ACCESSION AX627751 GI:28455789
VERSION AX627751.1
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 4792 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
source
Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 20.0%; Score 4; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 16 AGAA 19
Db 3 AGAA 6
RESULT 146
AX627837/c
LOCUS AX627837 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 4878 from Patent WO02053774.
ACCESSION AX627837
VERSION AX627837.1 GI:28455875
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 4878 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
source
Location/Qualifiers
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 20.0%; Score 4; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 14 GCAG 17
Db 8 GCAG 5
RESULT 147
AX630798
LOCUS AX630798 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 7839 from Patent WO02053774.
ACCESSION AX630798
VERSION AX630798.1 GI:28458838
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 7839 11-JUL-2002;
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FEATURES
source
Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 20.0%; Score 4; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 16 AGAA 19
Db 4 AGAA 7
RESULT 148
AR303500/c
LOCUS AR303500 10 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 225 from patent US 6544736.
ACCESSION AR303500
VERSION AR303500.1 GI:31692276
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Shimamoto,A., Furuichi,Y., Shibata,Y., Funaki,H., Ohara,E. and
Watabiki,M.
TITLE Method for synthesizing cDNA from mRNA sample
JOURNAL Patent: US 6544736-A 225 08-APR-2003;
LOCATION/Qualifiers
1..10
source
/organism="unknown"
/mol_type="genomic DNA"
Query Match 19.0%; Score 3.8; DB 1; Length 10;
Best Local Similarity 71.4%; Pred. No. 1.4e+02;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 14 GCAGAAG 20
Db 8 GCTCAAG 2
RESULT 149
AX472203
LOCUS AX472203 11 bp DNA linear PAT 09-AUG-2002
DEFINITION Sequence 194 from Patent WO02053775.
ACCESSION AX472203
VERSION AX472203.1 GI:22207240
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Hustert,E., Haberl,M. and Wojnowski,L.
TITLE Identification of the genetic determinants of the polymorphic
cyp3a5 expression
JOURNAL Patent: WO 02053775-A 194 11-JUL-2002;
EPIDAURUS BIOTECHNOLOGIE AG (DE)
FEATURES
source
Location/Qualifiers
1..11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 19.0%; Score 3.8; DB 1; Length 11;
Best Local Similarity 71.4%; Pred. No. 1.3e+02;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 14 GCAGAAG 20
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Db      || |||
        4 GCCAAG 10

RESULT 150
AX471682/c
LOCUS   AX471682          11 bp  DNA      linear  PAT 09-AUG-2002
DEFINITION   Sequence 1259 from Patent WO02053773.
ACCESSION   AX471682
VERSION     AX471682.1  GI:22206807
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Hofmann,K., Conradt,M. and Petersohn,D.
TITLE       Method for determining skin stress or skin ageing in vitro
JOURNAL     Patent: WO 02053773-A 1259 11-JUL-2002;
            HENKEL KGAA (DE)
FEATURES
            Location/Qualifiers
            source
            1..11
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      16 AGAAG 20
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Db      9 ATAAG 5

RESULT 151
AX6233509
LOCUS   AX6233509          11 bp  DNA      linear  PAT 21-FEB-2003
DEFINITION   Sequence 550 from Patent WO02053774.
ACCESSION   AX6233509
VERSION     AX6233509.1  GI:28451450
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 550 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
            Location/Qualifiers
            source
            1..11
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      16 AGAAG 20
        ||||
Db      2 AGGAG 6

RESULT 152
AX625581
LOCUS   AX625581          11 bp  DNA      linear  PAT 21-FEB-2003
DEFINITION   Sequence 2622 from Patent WO02053774.
ACCESSION   AX625581
VERSION     AX625581.1  GI:28453522
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 7971 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
            Location/Qualifiers
            source
            1..11
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      16 AGAAG 20
        ||||
Db      2 AGGAG 6

RESULT 153
AX628191/c
LOCUS   AX628191          11 bp  DNA      linear  PAT 21-FEB-2003
DEFINITION   Sequence 5232 from Patent WO02053774.
ACCESSION   AX628191
VERSION     AX628191.1  GI:28456229
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 5232 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
            Location/Qualifiers
            source
            1..11
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      16 AGAAG 20
        ||||
Db      2 AAAAG 6

RESULT 154
AX630930
LOCUS   AX630930          11 bp  DNA      linear  PAT 21-FEB-2003
DEFINITION   Sequence 7971 from Patent WO02053774.
ACCESSION   AX630930
VERSION     AX630930.1  GI:28458972
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Conradt,M. and Hofmann,K.
TITLE       Method for determining homeostasis of the skin
JOURNAL     Patent: WO 02053774-A 7971 11-JUL-2002;
            Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
            Location/Qualifiers
            source
            1..11
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      16 AGAAG 20
        ||||
Db      9 ATAAG 5

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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      17.0%; Score 3.4; DB 1; Length 11;
Best Local Similarity 80.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      16 AGAAG 20
      |||
Db      2 AGGAG 6

Search completed: July 15, 2004, 16:39:01
Job time : 0.001 secs
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GenCore version 5.1.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 16, 2004, 17:25:19 ; Search time 0.001 Seconds  
(without alignments)  
21.600 Million cell updates/sec

Title: us-10-024-369-47

Perfect score: 20

Sequence: 1 cccacctcttgggcagaag 20

Scoring table: IDENTITY

Gapop 10.0 , Gapext 0.5

Searched: 57 seqs, 540 residues

Total number of hits satisfying chosen parameters: 114

Minimum DB seq length: 8

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 43 summaries

Database : nrndb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	9	45.0	11	1	US-09-862-847-15
2	9	45.0	12	1	US-09-862-844-6
3	9	45.0	12	1	US-09-862-844-8
C 4	8	40.0	9	1	US-09-989-789-2078
C 5	8	40.0	9	1	US-09-989-789-2079
C 6	8	40.0	9	1	US-09-989-789-2262
C 7	8	40.0	9	1	US-09-989-789-2263
C 8	8	40.0	10	1	US-08-410-779B-47
C 9	8	40.0	10	1	US-08-410-779B-47
C 10	8	40.0	10	1	US-08-049-283A-31
C 11	8	40.0	10	1	US-08-049-283A-31
C 12	8	40.0	10	1	US-09-508-753B-70
C 13	7	35.0	8	1	US-08-593-343B-19
C 14	7	35.0	8	1	US-08-859-954-55
C 15	7	35.0	8	1	US-08-859-954-248
C 16	7	35.0	8	1	US-08-859-954-249
C 17	7	35.0	8	1	US-08-859-954-267
C 18	7	35.0	8	1	US-08-859-954-406
C 19	7	35.0	8	1	US-08-859-954-540
C 20	7	35.0	8	1	US-08-855-372B-6
C 21	7	35.0	8	1	US-09-498-851-6
C 22	7	35.0	9	1	US-08-068-945A-36
C 23	7	35.0	9	1	US-08-442-806-36
C 24	7	35.0	9	1	US-09-063-450-10
C 25	7	35.0	9	1	US-09-989-789-481
C 26	7	35.0	9	1	US-09-989-789-482
C 27	7	35.0	9	1	US-09-989-789-491
C 28	7	35.0	9	1	US-09-989-789-492
C 29	7	35.0	9	1	US-09-989-789-495
C 30	7	35.0	9	1	US-09-989-789-496
C 31	7	35.0	9	1	US-09-989-789-497
C 32	7	35.0	9	1	US-09-989-789-498
C 33	7	35.0	9	1	US-09-989-789-499

34 7 35.0 9 1 US-09-989-789-577 Sequence 577, App  
35 7 35.0 9 1 US-09-989-789-581 Sequence 581, App  
36 7 35.0 9 1 US-09-989-789-2179 Sequence 2179, App  
37 7 35.0 9 1 US-09-989-789-2180 Sequence 2180, App  
C 38 7 35.0 9 1 US-09-989-789-2233 Sequence 2233, App  
C 39 7 35.0 9 1 US-09-989-789-2234 Sequence 2234, App  
C 40 7 35.0 9 1 US-09-989-789-2235 Sequence 2235, App  
C 41 7 35.0 9 1 US-09-989-789-2264 Sequence 2264, App  
C 42 7 35.0 9 1 US-09-989-789-2355 Sequence 2355, App  
43 7 35.0 9 1 US-09-989-789-2358 Sequence 2358, App

ALIGNMENTS

RESULT 1

US-09-862-847-15  
; Sequence 15, Application US/09862847  
; Patent No. 6593111  
; GENERAL INFORMATION:  
; APPLICANT: Baric, Ralph S.  
; APPLICANT: Boyd, Yount  
; TITLE OF INVENTION: DIRECTION ASSEMBLY OF LARGE VIRAL GENOMES AND CHROMOSOMES  
; FILE REFERENCE: 5470.270  
; CURRENT APPLICATION NUMBER: US/09/862,847  
; PRIOR FILING DATE: 2001-05-21  
; PRIOR APPLICATION NUMBER: US 60/206,537  
; PRIOR FILING DATE: 2000-05-21  
; PRIOR APPLICATION NUMBER: US 60/285,320  
; PRIOR FILING DATE: 2001-04-20  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 15  
; LENGTH: 11  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide primer.  
US-09-862-847-15

Query Match 45.0%; Score 9; DB 1; Length 11;  
Best Local Similarity 100.0%; Pred. No. 2; Mismatches 0; Indels 0; Gaps 0;  
Matches 9; Conservative 0;  
QY 5 CCTCTTGG 13  
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Db 2 CCTCTTGG 10

RESULT 2

US-09-862-844-6  
; Sequence 6, Application US/09862844  
; Patent No. 6583986  
; GENERAL INFORMATION:  
; APPLICANT: Cai, Hong  
; APPLICANT: Keller, Richard  
; APPLICANT: Werner, James  
; APPLICANT: Goodwin, Peter  
; TITLE OF INVENTION: RAPID HAPLOTYPE BY SINGLE MOLECULE DETECTION  
; FILE REFERENCE: S-94,652  
; CURRENT APPLICATION NUMBER: US/09/862,844  
; CURRENT FILING DATE: 2001-05-21  
; NUMBER OF SEQ ID NOS: 21  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 6  
; LENGTH: 12  
; TYPE: DNA  
; ORGANISM: PNA probe MLLCY5P  
US-09-862-844-6  
Query Match 45.0%; Score 9; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.9; Mismatches 0; Indels 0; Gaps 0;  
Matches 9; Conservative 0;

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Qy 7 TTCTTGGGC 15
Db 2 TTCTTGGGC 10

RESULT 3
US-09-862-844-8
; Sequence 8, Application US/09862844
; Patent No. 6583986
; GENERAL INFORMATION:
; APPLICANT: Cai, Hong
; APPLICANT: Keller, Richard
; APPLICANT: Werner, James
; APPLICANT: Goodwin, Peter
; TITLE OF INVENTION: RAPID HAPLOTYPE BY SINGLE MOLECULE DETECTION
; FILE REFERENCE: S-94,652
; CURRENT APPLICATION NUMBER: US/09/862,844
; CURRENT FILING DATE: 2001-05-21
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 12
; TYPE: DNA
; ORGANISM: LNA probe MLLCysL
US-09-862-844-8

Query Match 45.0%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.9;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 TTCTTGGGC 15
Db 2 TTCTTGGGC 10

RESULT 4
US-09-989-789-2078/c
; Sequence 2078, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2078
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
US-09-989-789-2078

Query Match 40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTT 8
Db 8 CCCACCTT 1

RESULT 5
US-09-989-789-2079/c
; Sequence 2079, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2079
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
US-09-989-789-2079

Query Match 40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTT 8
Db 8 CCCACCTT 1

RESULT 6
US-09-989-789-2262/c
; Sequence 2262, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2262
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
US-09-989-789-2262

Query Match 40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 CACCTTCT 10
Db 9 CACCTTCT 2

RESULT 7
US-09-989-789-2263/c
; Sequence 2263, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2263
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
US-09-989-789-2263

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;
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-2263

Query Match          40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10
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Db 9 CACCTTCT 2

RESULT 8
US-08-410-779B-47/c
; Sequence 47, Application US/08410779B
; Patent No. 5814517
; GENERAL INFORMATION:
; APPLICANT: SEIDEL, H. MARTI
; APPLICANT: LAMB, I. PETER
; TITLE OF INVENTION: DNA SPACER REGULATORY ELEMENTS
; TITLE OF INVENTION: RESPONSIVE TO CYTOKINES AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 166
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LIGAND PHARMACEUTICALS INCORPORATED
; STREET: 9393 TOWNE CENTRE DRIVE
; CITY: SAN DIEGO
; STATE: CALIFORNIA
; COUNTRY: US
; ZIP: 92121
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 27-MAR-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/228,935
; FILING DATE: 14-APR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: JURGENSEN, THOMAS E
; REGISTRATION NUMBER: 34,195
; REFERENCE/DOCKET NUMBER: 016-0013A.US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 550-7675
; TELEFAX: (619) 535-3906
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "OTHER NUCLEIC ACID,
; SYNTHETIC DNA"
US-08-410-779B-47

Query Match          40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 47;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCTTGGG 14
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Db 10 TTCTTGGG 3

RESULT 9
PCT-US95-04477-47/c
; Sequence 47, Application PC/TUS9504477

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; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: DNA SPACER REGULATORY ELEMENTS RESPONSIVE TO
; CYTOKINES AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 165
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/04477
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/228,935
; FILING DATE: 14-APR-1994
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "OTHER NUCLEIC ACID,
; SYNTHETIC DNA"
PCT-US95-04477-47

Query Match          40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCTTGGG 14
    |||||
Db 10 TTCTTGGG 3

RESULT 10
US-08-049-283A-31/c
; Sequence 31, Application US/08049283A
; Patent No. 5502176
; GENERAL INFORMATION:
; APPLICANT: Tenen, Daniel G.
; APPLICANT: Pahl, Heike L.
; APPLICANT: Burn, Timothy C.
; TITLE OF INVENTION: Cell Specific Promoter and Uses Thereof
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/049,283A
; FILING DATE: 14-APR-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/020,465
; FILING DATE: 19-FEB-1993
; CLASSIFICATION: 435
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "OTHER NUCLEIC ACID,
; SYNTHETIC DNA"
PCT-US95-04477-47

Query Match          40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCTTGGG 14
    |||||
Db 10 TTCTTGGG 3

RESULT 9
PCT-US95-04477-47/c
; Sequence 47, Application PC/TUS9504477

```

REGISTRATION NUMBER: 22,592  
REFERENCE/DOCKET NUMBER: BIH91-03'A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 861-6240  
TELEFAX: (617) 861-9540  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-049-283A-31

Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 4.7;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 13 GGCAGAAG 20  
|||||  
Db 8 GGCAGAAG 1

RESULT 11  
US-08-049-283A-33/c  
Sequence 33, Application US/08049283A  
Patent No. 5502176  
GENERAL INFORMATION:  
APPLICANT: Tenen, Daniel G.  
APPLICANT: Pahl, Heike L.  
APPLICANT: Burn, Timothy C.  
TITLE OF INVENTION: Cell Specific Promoter and Uses Thereof  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: Massachusetts  
COUNTRY: USA  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/049,283A  
FILING DATE: 14-APR-1993  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/020,465  
FILING DATE: 19-FEB-1993  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/837,776  
FILING DATE: 13-FEB-1992  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Brook, David E.  
REGISTRATION NUMBER: 22,592  
REFERENCE/DOCKET NUMBER: BIH91-03'A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 861-6240  
TELEFAX: (617) 861-9540  
INFORMATION FOR SEQ ID NO: 33:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-049-283A-33

Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 4.7;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 GGCAGAA 19  
|||||  
Db 10 GGCAGAA 3

RESULT 12  
US-09-508-753B-70/c  
Sequence 70, Application US/09508753B  
Patent No. 6547136  
GENERAL INFORMATION:  
APPLICANT: Akira SHIMAMOTO  
APPLICANT: Yasuhiro FURUICHI  
APPLICANT: Yuko SHIBATA  
APPLICANT: Hiroko FUNAKI  
APPLICANT: Bijl OHARA  
APPLICANT: Masanori WATAHIKI  
TITLE OF INVENTION: Method for Synthesizing cDNA from mRNA sample  
FILE REFERENCE: 00162/HG  
CURRENT APPLICATION NUMBER: US/09/508,753B  
CURRENT FILING DATE: 2000-06-16  
PRIOR APPLICATION NUMBER: JP 9/270324  
PRIOR FILING DATE: 1997-09-18  
NUMBER OF SEQ ID NOS: 472  
SEQ ID NO 70  
LENGTH: 10  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Primer  
US-09-508-753B-70

Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 4.7;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 GGCAGAA 19  
|||||  
Db 10 GGCAGAA 3

RESULT 13  
US-08-593-345B-19/c  
Sequence 19, Application US/08593345B  
Patent No. 5851772  
GENERAL INFORMATION:  
APPLICANT: Mirzabekov, Andrei D  
APPLICANT: Lysov, Yuriy P  
APPLICANT: Shick, Valentine V  
APPLICANT: Dubiley, Svetlana A  
TITLE OF INVENTION: A Microchip Method for the Enrichment of  
TITLE OF INVENTION: Specific DNA Sequences.  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CHERSKOV & FLAYNIK  
STREET: 20 N. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: United States  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.50 inch, 1.4 MB storage  
COMPUTER: Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Wordperfect  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/593,345B  
FILING DATE: 29-JAN-96  
PRIOR APPLICATION DATA: No. 5851772e  
ATTORNEY/AGENT INFORMATION:



NAME: Cherskov, Michael J.  
 REGISTRATION NUMBER: 33,664  
 REFERENCE/DOCKET NUMBER: ANL-IN-95-029+30  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (312) 621-1330  
 TELEFAX: (312) 621-0088  
 INFORMATION FOR SEQ ID NO: 19:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 8 bases  
 TYPE: nucleic acid  
 STRANDEDNESS: No. 5851772 Applicable  
 TOPOLOGY: linear  
 MOLECULE TYPE: Genomic DNA  
 FEATURE:  
 NAME/KEY: No. 5851772e  
 LOCATION: 1-8  
 IDENTIFICATION METHOD: Similarity with known sequences.  
 OTHER INFORMATION: Complementarity with primer of  
 OTHER INFORMATION: exons to a-thalassemia gene.  
 US-08-593-345B-19

Query Match 35.0%; Score 7; DB 1; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 54;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 TCTTGGG 14  
 Db 7 TCTTGGG 1

RESULT 14  
 US-08-859-954-55/c  
 Sequence 55, Application US/08859954  
 Patent No. 6083695  
 GENERAL INFORMATION:  
 APPLICANT: Hardin, Susan H.  
 APPLICANT: Homayouni, Ramin  
 APPLICANT: Hardin, Paul E.  
 TITLE OF INVENTION: Design and Optimized Primer Library for  
 TITLE OF INVENTION: Gene Sequencing and Method Thereof  
 NUMBER OF SEQUENCES: 566  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Fulbright & Jaworski L.L.P.  
 STREET: 1301 McKinney, Suite 5100  
 CITY: Houston  
 STATE: Texas  
 COUNTRY: U.S.A.  
 ZIP: 77010-3095  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/859,954  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/632,782  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Paul, Thomas D.  
 REGISTRATION NUMBER: 32,714  
 REFERENCE/DOCKET NUMBER: D-5900  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 713/651-5325  
 TELEFAX: 713/651-5246  
 INFORMATION FOR SEQ ID NO: 55:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 8 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid  
 DESCRIPTION: /desc = "oligonucleotide"  
 HYPOTHETICAL: YES  
 ANTI-SENSE: YES  
 US-08-859-954-55  
 Query Match 35.0%; Score 7; DB 1; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 54;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 TTGGGCA 16  
 Db 8 TTGGGCA 2

RESULT 15  
 US-08-859-954-248/c  
 Sequence 248, Application US/08859954  
 Patent No. 6083695  
 GENERAL INFORMATION:  
 APPLICANT: Hardin, Susan H.  
 APPLICANT: Homayouni, Ramin  
 APPLICANT: Hardin, Paul E.  
 TITLE OF INVENTION: Design and Optimized Primer Library for  
 TITLE OF INVENTION: Gene Sequencing and Method Thereof  
 NUMBER OF SEQUENCES: 566  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Fulbright & Jaworski L.L.P.  
 STREET: 1301 McKinney, Suite 5100  
 CITY: Houston  
 STATE: Texas  
 COUNTRY: U.S.A.  
 ZIP: 77010-3095  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/859,954  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/632,782  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Paul, Thomas D.  
 REGISTRATION NUMBER: 32,714  
 REFERENCE/DOCKET NUMBER: D-5900  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 713/651-5325  
 TELEFAX: 713/651-5246  
 INFORMATION FOR SEQ ID NO: 248:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 8 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: other nucleic acid  
 DESCRIPTION: /desc = "oligonucleotide"  
 HYPOTHETICAL: YES  
 ANTI-SENSE: YES  
 US-08-859-954-248

Query Match 35.0%; Score 7; DB 1; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 54;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
 Db 7 CACCTTC 1

```

RESULT 16
US-08-859-954-249/c
; Sequence 249, Application US/08859954
; Patent No. 6083695
; GENERAL INFORMATION:
; APPLICANT: Hardin, Susan H.
; APPLICANT: Homayouni, Ramin
; APPLICANT: Hardin, Paul E.
; TITLE OF INVENTION: Design and Optimized Primer Library for
; CURRENT APPLICATION DATA: Gene Sequencing and Method Thereof
; NUMBER OF SEQUENCES: 566
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fulbright & Jaworski L.L.P.
; STREET: 1301 McKinney, Suite 5100
; CITY: Houston
; STATE: Texas
; COUNTRY: U.S.A.
; ZIP: 77010-3095
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/859,954
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/632,782
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul, Thomas D.
; REGISTRATION NUMBER: 32,714
; REFERENCE/DOCKET NUMBER: D-5900
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713/651-5325
; TELEFAX: 713/651-5246
; INFORMATION FOR SEQ ID NO: 249:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "oligonucleotide"
; HYPOTHETICAL: YES
; ANTI-SENSE: YES
US-08-859-954-249

Query Match 35.0%; Score 7; DB 1; Length 8;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9
Db 7 CACCTTC 1

RESULT 17
US-08-859-954-267/c
; Sequence 267, Application US/08859954
; Patent No. 6083695
; GENERAL INFORMATION:
; APPLICANT: Hardin, Susan H.
; APPLICANT: Homayouni, Ramin
; APPLICANT: Hardin, Paul E.
; TITLE OF INVENTION: Design and Optimized Primer Library for
; CURRENT APPLICATION DATA: Gene Sequencing and Method Thereof
; NUMBER OF SEQUENCES: 566
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fulbright & Jaworski L.L.P.
; STREET: 1301 McKinney, Suite 5100
; CITY: Houston
; STATE: Texas
; COUNTRY: U.S.A.
; ZIP: 77010-3095
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/859,954
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/632,782
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul, Thomas D.
; REGISTRATION NUMBER: 32,714
; REFERENCE/DOCKET NUMBER: D-5900
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713/651-5325
; TELEFAX: 713/651-5246
; INFORMATION FOR SEQ ID NO: 249:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "oligonucleotide"
; HYPOTHETICAL: YES
; ANTI-SENSE: YES
US-08-859-954-249

```

```

; STATE: Texas
; COUNTRY: U.S.A.
; ZIP: 77010-3095
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/859,954
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/632,782
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul, Thomas D.
; REGISTRATION NUMBER: 32,714
; REFERENCE/DOCKET NUMBER: D-5900
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713/651-5325
; TELEFAX: 713/651-5246
; INFORMATION FOR SEQ ID NO: 267:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "oligonucleotide"
; HYPOTHETICAL: YES
; ANTI-SENSE: YES
US-08-859-954-267

Query Match 35.0%; Score 7; DB 1; Length 8;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCTT 11
Db 8 CCTTCTT 2

RESULT 18
US-08-859-954-406/c
; Sequence 406, Application US/08859954
; Patent No. 6083695
; GENERAL INFORMATION:
; APPLICANT: Hardin, Susan H.
; APPLICANT: Homayouni, Ramin
; APPLICANT: Hardin, Paul E.
; TITLE OF INVENTION: Design and Optimized Primer Library for
; CURRENT APPLICATION DATA: Gene Sequencing and Method Thereof
; NUMBER OF SEQUENCES: 566
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fulbright & Jaworski L.L.P.
; STREET: 1301 McKinney, Suite 5100
; CITY: Houston
; STATE: Texas
; COUNTRY: U.S.A.
; ZIP: 77010-3095
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/859,954
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/632,782
; FILING DATE:

```

ATTORNEY/AGENT INFORMATION:  
NAME: Paul, Thomas D.  
REGISTRATION NUMBER: 32,714  
REFERENCE/DOCKET NUMBER: D-5900  
TELEPHONE: 713/651-5325  
TELEFAX: 713/651-5246  
INFORMATION FOR SEQ ID NO: 406:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "oligonucleotide"  
HYPOTHETICAL: YES  
ANTI-SENSE: YES  
US-08-859-954-406

Query Match 35.0%; Score 7; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 54;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 TTGGGCA 16  
DB 8 TTGGGCA 2

RESULT 19  
US-08-859-954-540/c  
Sequence 540, Application US/08859954  
Patent No. 6083695  
GENERAL INFORMATION:  
APPLICANT: Hardin, Susan H.  
APPLICANT: Homayouni, Ramin  
APPLICANT: Hardin, Paul E.  
TITLE OF INVENTION: Design and Optimized Primer Library for  
TITLE OF INVENTION: Gene Sequencing and Method Thereof  
NUMBER OF SEQUENCES: 566  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fulbright & Jaworski L.L.P.  
STREET: 1301 McKinney, Suite 5100  
CITY: Houston  
STATE: Texas  
COUNTRY: U.S.A.  
ZIP: 77010-3095  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/859,954  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/632,782  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Paul, Thomas D.  
REGISTRATION NUMBER: 32,714  
REFERENCE/DOCKET NUMBER: D-5900  
TELEPHONE: 713/651-5325  
TELEFAX: 713/651-5246  
INFORMATION FOR SEQ ID NO: 540:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "oligonucleotide"

HYPOTHETICAL: YES  
ANTI-SENSE: YES  
US-08-859-954-540

Query Match 35.0%; Score 7; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 54;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CCACCTT 8  
DB 7 CCACCTT 1

RESULT 20  
US-08-855-372B-6/c  
Sequence 6, Application US/08855372B  
Patent No. 6090549  
GENERAL INFORMATION:  
APPLICANT: Mirzabekov, Andrei D  
APPLICANT: Parinov, Sergei V  
APPLICANT: Barsky, Victor E  
APPLICANT: Kirillov, Eugene V  
APPLICANT: Dubiley, Svetlana A  
TITLE OF INVENTION: Use of Continuous/Contiguous Stacking Hybridization as a Diagn  
NUMBER OF SEQUENCES: 88  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CHERSKOV & FLAYNIK  
STREET: 20 N. Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: United States  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.50 inch, 1.4 MB storage  
COMPUTER: PC  
OPERATING SYSTEM: Microsoft Windows 98  
SOFTWARE: Wordperfect  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/855,372B  
FILING DATE: 13-MAY-97  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: U.S. 08/587,332  
FILING DATE: 16-JAN-96  
ATTORNEY/AGENT INFORMATION:  
NAME: Cherekov, Michael J.  
REGISTRATION NUMBER: 33,664  
REFERENCE/DOCKET NUMBER: ANL-IN-95-027  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (312) 621-1330  
TELEFAX: (312) 621-0088  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8 bases  
TYPE: nucleic acid  
STRANDEDNESS: No. 6090549 Applicable  
TOPOLOGY: linear  
MOLECULE TYPE: Genomic DNA  
HYPOTHETICAL: yes  
US-08-855-372B-6

Query Match 35.0%; Score 7; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 54;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAG 17  
DB 7 TGGGCAG 1

RESULT 21  
US-09-498-851-6/c  
Sequence 6, Application US/09498851  
Patent No. 6440671

```
;
; GENERAL INFORMATION:
; APPLICANT: Mirzabekov, Andrei D
; APPLICANT: Parinov, Sergei V
; APPLICANT: Barsky, Victor E
; APPLICANT: Kirillov, Eugene A
; APPLICANT: Dubiley, Svetlana A
; TITLE OF INVENTION: Use of Continuous/Contiguous
; NUMBER OF SEQUENCES: 88
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CHERSKOV & FLAYNIK
; STREET: 20 N. Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.50 inch, 1.4 MB storage
; COMPUTER: PC
; OPERATING SYSTEM: Microsoft Windows 98
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/498,851
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/855,372
; FILING DATE: 13-MAY-97
; APPLICATION NUMBER: U.S. 08/587,332
; FILING DATE: 16-JAN-96
; ATTORNEY/AGENT INFORMATION:
; NAME: Cherskov, Michael J.
; REGISTRATION NUMBER: 33,664
; REFERENCE/DOCKET NUMBER: ANL-IN-95-027
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312) 621-1330
; TELEFAX: (312) 621-0088
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 bases
; TYPE: nucleic acid
; STRANDEDNESS: No. 6440671 Applicable
; TOPOLOGY: linear
; MOLECULE TYPE: Genomic DNA
; HYPOTHETICAL: Yes
; US-09-498-851-6

Query Match 35.0%; Score 7; DB 1; Length 8;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGGCAG 17
Db 7 TGGGCAG 1

RESULT 22
US-08-068-945A-36
; Sequence 36, Application US/08068945A
; Patent No. 5616483
; GENERAL INFORMATION:
; APPLICANT: Bjursell, Gunnar
; APPLICANT: Carlsson, Peter
; APPLICANT: Enerback, Sven
; APPLICANT: Hansson, Lennart
; APPLICANT: Lidberg, Ulf
; APPLICANT: Nilsson, Jeanette
; APPLICANT: Tornell, Jan
; TITLE OF INVENTION: New DNA Sequences
; NUMBER OF SEQUENCES: 58
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: White & Case
; STREET: 1155 Avenue of the Americas
; CITY: New York

Query Match 35.0%; Score 7; DB 1; Length 8;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 11 TGGGCAG 17
Db 7 TGGGCAG 1

RESULT 22
US-08-068-945A-36
; Sequence 36, Application US/08068945A
; Patent No. 5616483
; GENERAL INFORMATION:
; APPLICANT: Bjursell, Gunnar
; APPLICANT: Carlsson, Peter
; APPLICANT: Enerback, Sven
; APPLICANT: Hansson, Lennart
; APPLICANT: Lidberg, Ulf
; APPLICANT: Nilsson, Jeanette
; APPLICANT: Tornell, Jan
; TITLE OF INVENTION: New DNA Sequences
; NUMBER OF SEQUENCES: 58
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: White & Case
; STREET: 1155 Avenue of the Americas
; CITY: New York
```

```
;
; STATE: New York
; COUNTRY: United States
; ZIP: 10036-2787
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/068,945A
; FILING DATE: 27-MAY-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: SE 9201809-2
; FILING DATE: 11-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: SE 9201826-6
; FILING DATE: 12-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: SE 9202088-2
; FILING DATE: 03-JUL-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: SE 9300902-5
; FILING DATE: 19-MAR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Sterner, Richard J.
; REGISTRATION NUMBER: 35,372
; REFERENCE/DOCKET NUMBER: 1103326-052
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 819-8783
; TELEFAX: (212) 354-8113
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-068-945A-36

Query Match 35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 TTCTTG 13
Db 2 TTCTTG 8

RESULT 23
US-08-442-806-36
; Sequence 36, Application US/08442806
; Patent No. 5716817
; GENERAL INFORMATION:
; APPLICANT: Bjursell, Gunnar
; APPLICANT: Carlsson, Peter
; APPLICANT: Enerback, Sven
; APPLICANT: Hansson, Lennart
; APPLICANT: Lidberg, Ulf
; APPLICANT: Nilsson, Jeanette
; APPLICANT: Tornell, Jan
; TITLE OF INVENTION: Genomic DNA Sequences
; NUMBER OF SEQUENCES: 58
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: White & Case
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States
; ZIP: 10036-2787
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/442,806  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/068,945  
FILING DATE: 27-MAY-1993  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9201809-2  
FILING DATE: 11-JUN-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9201826-6  
FILING DATE: 12-JUN-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9202088-2  
FILING DATE: 03-JUL-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9300902-5  
FILING DATE: 19-MAR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Steiner, Richard J.  
REGISTRATION NUMBER: 35,372  
REFERENCE/DOCKET NUMBER: 1103326-052  
TELEPHONE: (212)819-9783  
TELEFAX: (212)354-8113  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-442-806-36

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCTTGG 13  
Db 2 TTCTTGG 8

RESULT 24  
US-09-063-450-10/c  
Sequence 10, Application US/09063450  
Patent No. 6109776  
GENERAL INFORMATION:  
APPLICANT: Gene Logic, Inc.  
TITLE OF INVENTION: Method and System for Computationally Identifying  
FILE OF INVENTION: Clusters Within a Set of Sequences  
FILE REFERENCE: 77001.002  
CURRENT APPLICATION NUMBER: US/09/063,450  
CURRENT FILING DATE: 1998-04-21  
NUMBER OF SEQ ID NOS: 38  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 10  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example  
OTHER INFORMATION: sequence illustrating a computational methodology  
US-09-063-450-10

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
Db 9 CACCTTC 3

RESULT 25  
US-09-989-789-481/c  
Sequence 481, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:  
APPLICANT: LIU, Qiang  
TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
FILE OF INVENTION: TRIPLETS BY ZINC FINGERS  
FILE REFERENCE: 8325-0011.20 / S11-US2  
CURRENT APPLICATION NUMBER: US/09/989,789  
CURRENT FILING DATE: 2002-03-25  
NUMBER OF SEQ ID NOS: 4085  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 481  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example target  
OTHER INFORMATION: DNA  
US-09-989-789-481

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCTT 11  
Db 8 CCTTCTT 2

RESULT 26  
US-09-989-789-482/c  
Sequence 482, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:  
APPLICANT: LIU, Qiang  
TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
FILE OF INVENTION: TRIPLETS BY ZINC FINGERS  
FILE REFERENCE: 8325-0011.20 / S11-US2  
CURRENT APPLICATION NUMBER: US/09/989,789  
CURRENT FILING DATE: 2002-03-25  
NUMBER OF SEQ ID NOS: 4085  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 482  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example target  
OTHER INFORMATION: DNA  
US-09-989-789-482

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCTT 11  
Db 8 CCTTCTT 2

RESULT 27  
US-09-989-789-491  
Sequence 491, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:

```
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 491
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-491
```

```
Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      14 GCAGAAG 20
        |||||
Db       1 GCAGAAG 7
```

```
RESULT 28
US-09-989-789-492
; Sequence 492, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 492
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-492
```

```
Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      14 GCAGAAG 20
        |||||
Db       1 GCAGAAG 7
```

```
RESULT 29
US-09-989-789-495
; Sequence 495, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 495
; LENGTH: 9
; TYPE: DNA
```

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-495
```

```
Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      14 GCAGAAG 20
        |||||
Db       1 GCAGAAG 7
```

```
RESULT 30
US-09-989-789-496
; Sequence 496, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 496
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-496
```

```
Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      14 GCAGAAG 20
        |||||
Db       1 GCAGAAG 7
```

```
RESULT 31
US-09-989-789-497
; Sequence 497, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT APPLICATION NUMBER: US/09/989,789
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 497
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-497
```

```
Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      14 GCAGAAG 20
```

```
Db      1 GCAGAAG 7
|||||||
RESULT 32
US-09-989-789-498
; Sequence 498, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 498
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-498

Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      14 GCAGAAG 20
Db      1 GCAGAAG 7
|||||||

RESULT 33
US-09-989-789-499
; Sequence 499, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 499
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-499

Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      14 GCAGAAG 20
Db      1 GCAGAAG 7
|||||||

RESULT 34
US-09-989-789-577
; Sequence 577, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 577
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-577

Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      14 GCAGAAG 20
Db      1 GCAGAAG 7
|||||||

RESULT 35
US-09-989-789-581
; Sequence 581, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 581
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-581

Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      14 GCAGAAG 20
Db      1 GCAGAAG 7
|||||||

RESULT 36
US-09-989-789-2179
; Sequence 2179, Application US/09989789
; Patent No. 6588746
; GENERAL INFORMATION:
; APPLICANT: LIU, Qiang
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE
; FILE REFERENCE: 8325-0011.20 / S11-US2
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 4085
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2179
; LENGTH: 9
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example target
; OTHER INFORMATION: DNA
US-09-989-789-2179

Query Match      35.0%; Score 7; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      14 GCAGAAG 20
Db      1 GCAGAAG 7
|||||||
```

; OTHER INFORMATION: Description of Artificial Sequence: example target  
; OTHER INFORMATION: DNA  
US-09-989-789-2179

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 13 GGCAGAA 19  
|||||  
Db 3 GGCAGAA 9

## RESULT 37

US-09-989-789-2180  
; Sequence 2180, Application US/09989789  
; Patent No. 6588746  
; GENERAL INFORMATION:  
; APPLICANT: LIU, Qiang  
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
; FILE REFERENCE: 8325-0011.20 / S11-US2  
; CURRENT APPLICATION NUMBER: US/09/989,789  
; CURRENT FILING DATE: 2002-03-25  
; NUMBER OF SEQ ID NOS: 4085  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2180  
; LENGTH: 9  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: example target  
; OTHER INFORMATION: DNA  
US-09-989-789-2180

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 13 GGCAGAA 19  
|||||  
Db 3 GGCAGAA 9

## RESULT 38

US-09-989-789-2233/c  
; Sequence 2233, Application US/09989789  
; Patent No. 6588746  
; GENERAL INFORMATION:  
; APPLICANT: LIU, Qiang  
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
; FILE REFERENCE: 8325-0011.20 / S11-US2  
; CURRENT APPLICATION NUMBER: US/09/989,789  
; CURRENT FILING DATE: 2002-03-25  
; NUMBER OF SEQ ID NOS: 4085  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2233  
; LENGTH: 9  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: example target  
; OTHER INFORMATION: DNA  
US-09-989-789-2233

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
|||||  
Db 9 CACCTTC 3

## RESULT 39

US-09-989-789-2234/c  
; Sequence 2234, Application US/09989789  
; Patent No. 6588746  
; GENERAL INFORMATION:  
; APPLICANT: LIU, Qiang  
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
; FILE REFERENCE: 8325-0011.20 / S11-US2  
; CURRENT APPLICATION NUMBER: US/09/989,789  
; CURRENT FILING DATE: 2002-03-25  
; NUMBER OF SEQ ID NOS: 4085  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2234  
; LENGTH: 9  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: example target  
; OTHER INFORMATION: DNA  
US-09-989-789-2234

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
|||||  
Db 9 CACCTTC 3

## RESULT 40

US-09-989-789-2235/c  
; Sequence 2235, Application US/09989789  
; Patent No. 6588746  
; GENERAL INFORMATION:  
; APPLICANT: LIU, Qiang  
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
; FILE REFERENCE: 8325-0011.20 / S11-US2  
; CURRENT APPLICATION NUMBER: US/09/989,789  
; CURRENT FILING DATE: 2002-03-25  
; NUMBER OF SEQ ID NOS: 4085  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2235  
; LENGTH: 9  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: example target  
; OTHER INFORMATION: DNA  
US-09-989-789-2235

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
|||||  
Db 9 CACCTTC 3

## RESULT 41

US-09-989-789-2264/c  
; Sequence 2264, Application US/09989789  
; Patent No. 6588746  
; GENERAL INFORMATION:  
; APPLICANT: LIU, Qiang  
; TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
; FILE REFERENCE: 8325-0011.20 / S11-US2



US-09-989-789-2358

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAG 17  
Db 1 TGGGCAG 7

Search completed: July 16, 2004, 17:25:19  
Job time : 0.001 secs

US-09-989-789-2358

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTC 9  
Db 7 CACCTTC 1

RESULT 42

US-09-989-789-2355

Sequence 2355, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:  
APPLICANT: LIU, Qiang  
TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
FILE REFERENCE: 8325-0011.20 / S11-US2  
CURRENT APPLICATION NUMBER: US/09/989,789  
CURRENT FILING DATE: 2002-03-25  
NUMBER OF SEQ ID NOS: 4085  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2355  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example target  
US-09-989-789-2264

US-09-989-789-2355

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAG 17  
Db 1 TGGGCAG 7

RESULT 43

US-09-989-789-2358

Sequence 2358, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:  
APPLICANT: LIU, Qiang  
TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
FILE REFERENCE: 8325-0011.20 / S11-US2  
CURRENT APPLICATION NUMBER: US/09/989,789  
CURRENT FILING DATE: 2002-03-25  
NUMBER OF SEQ ID NOS: 4085  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2358  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example target  
US-09-989-789-2355

US-09-989-789-2355

Query Match 35.0%; Score 7; DB 1; Length 9;  
Best Local Similarity 100.0%; Pred. No. 48;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAG 17  
Db 1 TGGGCAG 7

RESULT 43

US-09-989-789-2358

Sequence 2358, Application US/09989789  
Patent No. 6588746  
GENERAL INFORMATION:  
APPLICANT: LIU, Qiang  
TITLE OF INVENTION: POSITION DEPENDENT RECOGNITION OF GNN NUCLEOTIDE  
FILE REFERENCE: 8325-0011.20 / S11-US2  
CURRENT APPLICATION NUMBER: US/09/989,789  
CURRENT FILING DATE: 2002-03-25  
NUMBER OF SEQ ID NOS: 4085  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2358  
LENGTH: 9  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: example target  
US-09-989-789-2355

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: July 15, 2004, 18:05:04 ; Search time 0.001 Seconds  
(without alignments)  
72.760 Million cell updates/sec

Title: us-10-024-369-47

Perfect score: 20

Sequence: 1 cccacctctctggcagaaga 20

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 0.5

Searched: 169 seqs, 1819 residues

Total number of hits satisfying chosen parameters: 338

Minimum DB seq length: 8

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2000 summaries

Database : rngdb.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	20	100.0	20	1	Human ABC transpor
2	12	60.0	15	1	Human IL-2 probe S
C 3	11.8	59.0	15	1	IGFBP2 oligonucleo
C 4	11.4	57.0	15	1	IGFBP2 oligonucleo
C 5	11.4	57.0	15	1	IGFBP2 oligonucleo
C 6	11	55.0	13	1	IGFBP2 oligonucleo
C 7	11	55.0	13	1	Oligonucleotide SE
C 8	11	55.0	13	1	Oligonucleotide SE
C 9	11	55.0	13	1	Oligonucleotide SE
C 10	10	50.0	10	1	Metastatic breast
C 11	10	50.0	11	1	Human skin EST 782
C 12	10	50.0	11	1	Human skin EST 405
C 13	10	50.0	12	1	Oligonucleotide pr
C 14	10	50.0	12	1	Oligonucleotide pr
C 15	10	50.0	13	1	5' exon-intron jun
C 16	9.8	49.0	13	1	Oligonucleotide SE
C 17	9.8	49.0	13	1	Oligonucleotide SE
C 18	9.8	49.0	13	1	Oligonucleotide SE
C 19	9.8	49.0	13	1	Oligonucleotide SE
C 20	9.4	47.0	11	1	Human CYP3A5 gene
C 21	9.4	47.0	12	1	Oligonucleotide pr
C 22	9.4	47.0	12	1	Oligonucleotide pr
C 23	9.4	47.0	12	1	Oligonucleotide pr
C 24	9.4	47.0	12	1	Oligonucleotide pr
C 25	9.4	47.0	12	1	Oligonucleotide pr
C 26	9.4	47.0	12	1	Oligonucleotide pr
C 27	9.4	47.0	12	1	Oligonucleotide pr
C 28	9.4	47.0	12	1	Oligonucleotide pr
C 29	9	45.0	10	1	Human dendritic ce
C 30	9	45.0	10	1	Human dendritic ce
C 31	9	45.0	10	1	Human dendritic ce
C 32	9	45.0	10	1	Metastatic breast
C 33	9	45.0	10	1	Yeast NORF gene SA

34	9	45.0	10	1	ABT14287
35	9	45.0	11	1	AAA87795
36	9	45.0	11	1	Human transcriptio
37	9	45.0	11	1	Human skin EST 220
38	9	45.0	11	1	Human skin EST 962
39	9	45.0	11	1	P15B4 promoter tra
40	9	45.0	11	1	Transmissible gast
C 41	9	45.0	12	1	Oligonucleotide pr
C 42	9	45.0	12	1	Oligonucleotide pr
C 43	9	45.0	12	1	Oligonucleotide pr
C 44	9	45.0	12	1	Oligonucleotide pr
C 45	9	45.0	12	1	Oligonucleotide pr
C 46	9	45.0	12	1	Oligonucleotide pr
C 47	9	45.0	12	1	Oligonucleotide pr
C 48	9	45.0	12	1	Oligonucleotide pr
C 49	9	45.0	12	1	Oligonucleotide pr
C 50	9	45.0	12	1	Oligonucleotide pr
C 51	9	45.0	12	1	Oligonucleotide pr
C 52	9	45.0	12	1	Oligonucleotide pr
C 53	9	45.0	12	1	Oligonucleotide pr
C 54	9	45.0	12	1	Oligonucleotide pr
C 55	9	45.0	12	1	Oligonucleotide pr
C 56	9	45.0	12	1	Oligonucleotide pr
C 57	9	45.0	12	1	Oligonucleotide pr
C 58	9	45.0	12	1	MLLCy5L LNA probe
C 59	9	45.0	12	1	MLLCy5P PNA probe
C 60	8.4	42.0	10	1	Cytokine responsiv
C 61	8.4	42.0	10	1	Regulatory element
C 62	8.4	42.0	10	1	Human dendritic ce
C 63	8.4	42.0	10	1	Human dendritic ce
C 64	8.4	42.0	10	1	Human dendritic ce
C 65	8.4	42.0	10	1	Metastatic breast
C 66	8.4	42.0	10	1	Metastatic breast
C 67	8.4	42.0	10	1	Metastatic breast
C 68	8.4	42.0	10	1	Metastatic breast
C 69	8.4	42.0	10	1	Human dendritic ce
C 70	8.4	42.0	10	1	Probe #25 for sequ
C 71	8.4	42.0	10	1	Human ubiquitously
C 72	8.4	42.0	10	1	Yeast NORF gene SA
C 73	8.4	42.0	10	1	Yeast NORF gene SA
C 74	8.4	42.0	10	1	Yeast NORF gene SA
C 75	8.4	42.0	10	1	Yeast NORF gene SA
C 76	8.4	42.0	10	1	Yeast NORF gene SA
C 77	8.4	42.0	10	1	Yeast NORF gene SA
C 78	8.4	42.0	10	1	Yeast NORF gene SA
C 79	8.4	42.0	10	1	Yeast NORF gene SA
C 80	8.4	42.0	10	1	Yeast NORF gene SA
C 81	8.4	42.0	10	1	Human CHRE gene p
C 82	8.4	42.0	10	1	Human ALAS2 gene p
C 83	8.4	42.0	10	1	Human E7B primer-
C 84	8.4	42.0	10	1	Human PHKG2 prefer
C 85	8.4	42.0	10	1	Human PHKG2 prefer
C 86	8.4	42.0	10	1	Human transcriptio
C 87	8.4	42.0	10	1	Human mitochondria
C 88	8.4	42.0	10	1	Transcript tag DNA
C 89	8.4	42.0	10	1	Rat smooth muscle
C 90	8.4	42.0	10	1	Rat smooth muscle
C 91	8.4	42.0	10	1	Human GRM8 gene po
C 92	8.4	42.0	10	1	Human PLAU gene, p
C 93	8.4	42.0	10	1	Stuffer sequence u
C 94	8.4	42.0	11	1	Human MN gene 5' d
C 95	8.4	42.0	11	1	Human MN gene intr
C 96	8.4	42.0	11	1	Human skin stress/
C 97	8.4	42.0	11	1	Human skin stress/
C 98	8.4	42.0	11	1	Human skin stress/
C 99	8.4	42.0	11	1	Human skin EST 413
C 100	8.4	42.0	11	1	Human skin EST 550
C 101	8.4	42.0	11	1	Human skin EST 797
C 102	8.4	42.0	11	1	Human skin EST 437
C 103	8.4	42.0	11	1	Human skin EST 479
C 104	8.4	42.0	11	1	Human skin EST 483
C 105	8.4	42.0	11	1	Human skin EST 262
C 106	8.4	42.0	11	1	Human skin EST 487

107	8.4	42.0	11	1	ABV67518	Human skin EST 530
108	8.4	42.0	11	1	ABV72108	Human skin EST 989
c 109	8.4	42.0	11	1	ABV62632	Human skin EST 418
c 110	8.4	42.0	11	1	ABV65381	Human skin EST 316
111	8.4	42.0	11	1	ABV67446	Human skin EST 523
112	8.4	42.0	11	1	ABV66204	Human skin EST 399
113	8.4	42.0	11	1	ABV65314	Human skin EST 310
114	8.4	42.0	11	1	ABV70072	Human skin EST 785
c 115	8.4	42.0	11	1	ABV69202	Human skin EST 698
c 116	8.4	42.0	11	1	ABV70053	Human skin EST 783
c 117	8	40.0	8	1	AAU03937	5'-primer used for
c 118	8	40.0	8	1	AAU09546	3'-primer used for
c 119	8	40.0	8	1	AAU09415	5'-primer used for
c 120	8	40.0	8	1	AAU09568	3'-primer used for
c 121	8	40.0	9	1	ABQ71965	Zinc finger protei
c 122	8	40.0	9	1	ABQ71964	Zinc finger protei
c 123	8	40.0	9	1	ABQ71781	Zinc finger protei
c 124	8	40.0	9	1	ABQ71780	Zinc finger protei
c 125	8	40.0	9	1	ACD06034	Human VEGF-targete
c 126	8	40.0	9	1	ACD19256	Human VEGF-targete
c 127	8	40.0	9	1	ADA64108	Zinc finger target
c 128	8	40.0	9	1	ADA64291	Zinc finger target
c 129	8	40.0	9	1	ADA64292	Zinc finger target
c 130	8	40.0	9	1	ADA64107	Zinc finger target
c 131	8	40.0	9	1	AAU09415	Human dendritic ce
c 132	8	40.0	10	1	AAZ77868	Human dendritic ce
c 133	8	40.0	10	1	AAZ78273	Human dendritic ce
c 134	8	40.0	10	1	AAZ78942	Human dendritic ce
c 135	8	40.0	10	1	AAZ77770	Human dendritic ce
c 136	8	40.0	10	1	AAZ77870	Human dendritic ce
c 137	8	40.0	10	1	AAZ779364	Human dendritic ce
c 138	8	40.0	10	1	AAZ79551	Human dendritic ce
c 139	8	40.0	10	1	AAZ83134	Metastatic breast
c 140	8	40.0	10	1	AAZ81919	Metastatic breast
c 141	8	40.0	10	1	AAZ84193	Metastatic breast
c 142	8	40.0	10	1	AAZ82122	Metastatic breast
c 143	8	40.0	10	1	AAZ83647	Metastatic breast
c 144	8	40.0	10	1	AAZ83418	Metastatic breast
c 145	8	40.0	10	1	AAZ82784	Metastatic breast
c 146	8	40.0	10	1	AAZ85883	Metastatic breast
c 147	8	40.0	10	1	AAZ86535	Metastatic breast
c 148	8	40.0	10	1	AAZ81064	Metastatic breast
c 149	8	40.0	10	1	AAZ83296	Metastatic breast
c 150	8	40.0	10	1	AAZ84897	Metastatic breast
c 151	8	40.0	10	1	AAZ81128	Metastatic breast
c 152	8	40.0	10	1	AAZ83682	Metastatic breast
c 153	8	40.0	10	1	AAZ83851	Metastatic breast
c 154	8	40.0	10	1	AAZ79914	Human dendritic ce
c 155	8	40.0	10	1	AAH64317	Human ubiquitously
c 156	8	40.0	10	1	AAH63292	Human colon epithe
c 157	8	40.0	10	1	AAF69638	Human IL4Ralpha ge
c 158	8	40.0	10	1	AAF35751	Yeast NORF gene SA
c 159	8	40.0	10	1	AAF39472	Yeast NORF gene SA
c 160	8	40.0	10	1	AAF39402	Yeast NORF gene SA
c 161	8	40.0	10	1	AAF41579	Yeast NORF gene SA
c 162	8	40.0	10	1	AAF43940	Yeast NORF gene SA
c 163	8	40.0	10	1	AAF34735	Yeast NORF gene SA
c 164	8	40.0	10	1	AAF37328	Yeast NORF gene SA
c 165	8	40.0	10	1	ABK24258	Retinaldehyde-bind
c 166	8	40.0	10	1	ABK23697	Transcript tag DNA
c 167	8	40.0	10	1	ABK23697	Transcript tag DNA
c 168	8	40.0	10	1	AAU16818	Human apolipoprote
c 169	8	40.0	10	1	ADC09948	Optical nucleic ac
c 170	7	35.0	20	1	AAU62417	Human ABC transpor
c 171	6.4	32.0	12	1	ABH86112	Oligonucleotide pr
c 172	6.4	32.0	12	1	ABH86113	Oligonucleotide pr
c 173	6	30.0	10	1	AAZ79378	Human dendritic ce
c 174	6	30.0	10	1	AAZ77868	Human dendritic ce
c 175	6	30.0	10	1	AAZ82122	Metastatic breast
c 176	6	30.0	10	1	AAZ83647	Metastatic breast
c 177	6	30.0	10	1	AAZ84897	Metastatic breast
c 178	6	30.0	10	1	AAH64317	Human ubiquitously
c 179	6	30.0	11	1	ABV64418	Human skin EST 220
c 180	6	30.0	11	1	ABV71839	Human skin EST 962
c 181	6	30.0	11	1	ABQ87500	Human skin stress/
c 182	6	30.0	11	1	ABV67047	Human skin EST 483
c 183	5.4	27.0	10	1	AAZ84938	Metastatic breast
c 184	5.4	27.0	10	1	AAH63873	Human ubiquitously
c 185	5.4	27.0	10	1	AAF37520	Yeast NORF gene SA
c 186	5.4	27.0	10	1	ABV84246	Human mitochondria
c 187	5.4	27.0	10	1	ABK23703	Transcript tag DNA
c 188	5.4	27.0	10	1	AAZ78942	Human dendritic ce
c 189	5.4	27.0	10	1	AAZ78942	Human dendritic ce
c 190	5.4	27.0	10	1	AAZ78942	Human dendritic ce
c 191	5.4	27.0	10	1	AAZ78942	Human dendritic ce
c 192	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 193	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 194	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 195	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 196	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 197	5.4	27.0	12	1	ABH85777	Oligonucleotide pr
c 198	5.2	26.0	11	1	ABV66344	Human skin EST 413
c 199	5.2	26.0	11	1	ABV72108	Human skin EST 989
c 200	5.2	26.0	11	1	ABV66204	Human skin EST 399
c 201	5	25.0	8	1	AAU03937	5'-primer used for
c 202	5	25.0	8	1	AAU09546	3'-primer used for
c 203	5	25.0	8	1	AAU09415	5'-primer used for
c 204	5	25.0	8	1	AAU09568	3'-primer used for
c 205	5	25.0	9	1	ABQ71965	Zinc finger protei
c 206	5	25.0	9	1	ABQ71964	Zinc finger protei
c 207	5	25.0	9	1	ABQ71781	Zinc finger protei
c 208	5	25.0	9	1	ABQ71780	Zinc finger protei
c 209	5	25.0	9	1	ADA64108	Zinc finger target
c 210	5	25.0	9	1	ADA64291	Zinc finger target
c 211	5	25.0	9	1	ADA64292	Zinc finger target
c 212	5	25.0	9	1	ADA64107	Zinc finger target
c 213	5	25.0	10	1	AAZ81481	Metastatic breast
c 214	5	25.0	10	1	AAZ78803	Metastatic breast
c 215	5	25.0	10	1	AAZ82426	Metastatic breast
c 216	5	25.0	10	1	AAZ42275	Yeast NORF gene SA
c 217	5	25.0	10	1	AAZ80869	Metastatic breast
c 218	5	25.0	10	1	AAZ4723	Yeast NORF gene SA
c 219	5	25.0	10	1	AAZ4723	Yeast NORF gene SA
c 220	5	25.0	10	1	AAZ4723	Yeast NORF gene SA
c 221	5	25.0	10	1	AAZ4723	Yeast NORF gene SA
c 222	5	25.0	10	1	AAZ72900	Human GRM8 gene po
c 223	5	25.0	10	1	AAZ78273	Human dendritic ce
c 224	5	25.0	10	1	AAZ79364	Human dendritic ce
c 225	5	25.0	10	1	AAZ83134	Metastatic breast
c 226	5	25.0	10	1	AAZ83296	Metastatic breast
c 227	5	25.0	10	1	AAH63292	Human colon epithe
c 228	5	25.0	10	1	AAF35751	Yeast NORF gene SA
c 229	5	25.0	10	1	AAF39472	Yeast NORF gene SA
c 230	5	25.0	10	1	AAF41579	Yeast NORF gene SA
c 231	5	25.0	10	1	AAF34735	Yeast NORF gene SA
c 232	5	25.0	10	1	ABK37328	Yeast NORF gene SA
c 233	5	25.0	10	1	ABK3697	Transcript tag DNA
c 234	5	25.0	11	1	ABV70040	Human skin EST 782
c 235	5	25.0	11	1	ABV62619	Human skin EST 405
c 236	5	25.0	11	1	AAZ21210	Transmissible gast
c 237	5	25.0	11	1	AAU16595	Human MN gene 5' d
c 238	5	25.0	11	1	AAZ52514	Human MN gene intr
c 239	5	25.0	11	1	ABV62651	Human skin EST 437
c 240	5	25.0	11	1	ABV70072	Human skin EST 785
c 241	5	25.0	12	1	ABH76170	Oligonucleotide pr
c 242	5	25.0	12	1	ABH71877	Oligonucleotide pr
c 243	5	25.0	12	1	ABH91427	Oligonucleotide pr
c 244	5	25.0	12	1	ABH61189	Oligonucleotide pr
c 245	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 246	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 247	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 248	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 249	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 250	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 251	5	25.0	12	1	ABH8586	Oligonucleotide pr
c 252	5	25.0	12	1	ABH8586	Oligonucleotide pr

253	5	25.0	12	1	ABI73341	Oligonucleotide pr
254	5	25.0	13	1	AA54180	5' exon-intron jun
c 255	5	25.0	13	1	ABC48640	Oligonucleotide SE
256	5	25.0	13	1	ABC48641	Oligonucleotide SE
c 257	5	25.0	15	1	AB96458	Human IL-2 probe S
258	5	25.0	15	1	AAF45929	IGFBP2 oligonucleo
259	5	25.0	15	1	AAF45927	IGFBP2 oligonucleo
260	5	25.0	15	1	AAF45928	IGFBP2 oligonucleo
c 261	4.4	22.0	10	1	ABL88354	Human CHRE gene p
c 262	4.4	22.0	10	1	ABV78454	Human transcrip tio
c 263	4.4	22.0	10	1	AA569638	Human IL4Ralpha ge
c 264	4.4	22.0	11	1	ABV67518	Human skin EST 530
c 265	4.4	22.0	12	1	ABF48769	Oligonucleotide pr
c 266	4.4	22.0	13	1	ABF26997	Oligonucleotide SE
c 267	4.4	22.0	13	1	ABF26996	Oligonucleotide SE
c 268	4.2	21.0	10	1	ABK21181	Metastatic breast
c 269	4.2	21.0	10	1	ABK24258	Retinaldehyde-bind
c 270	4.2	21.0	12	1	AAJ25619	MLJCYSL LNA probe
c 271	4.2	21.0	12	1	AAJ25617	MLJCYS PNA probe
c 272	4	20.0	9	1	ACD06034	Human VEGF-targete
c 273	4	20.0	9	1	ACD19256	Human VEGF-targete
274	4	20.0	10	1	AA277982	Human dendritic ce
275	4	20.0	10	1	AA278502	Human dendritic ce
c 276	4	20.0	10	1	ABT14287	Nucleic acid PCR a
c 277	4	20.0	10	1	AA714161	Cytokine responsiv
278	4	20.0	10	1	AAV56888	Regulatory element
279	4	20.0	10	1	AAZ79653	Human dendritic ce
c 280	4	20.0	10	1	AAZ77834	Human dendritic ce
c 281	4	20.0	10	1	AAZ78009	Human dendritic ce
c 282	4	20.0	10	1	AAZ85708	Metastatic breast
c 283	4	20.0	10	1	AAZ79893	Human dendritic ce
c 284	4	20.0	10	1	AAZ73656	Probe #25 for sequ
c 285	4	20.0	10	1	AAZ73752	Yeast NORF gene SA
c 286	4	20.0	10	1	AAZ73754	Yeast NORF gene SA
c 287	4	20.0	10	1	AAZ40919	Yeast NORF gene SA
c 288	4	20.0	10	1	AAZ38830	Yeast NORF gene SA
c 289	4	20.0	10	1	ABK37010	Human ALAS2 gene a
c 290	4	20.0	10	1	ABL39516	Human ETPB primer-
c 291	4	20.0	10	1	ABL52253	Human PHKG2 prefer
c 292	4	20.0	10	1	ABL52252	Human PHKG2 prefer
c 293	4	20.0	10	1	ABN84506	Rat smooth muscle
c 294	4	20.0	10	1	ACA60848	Rat smooth muscle
c 295	4	20.0	10	1	ABK96537	Human PLAU gene, p
c 296	4	20.0	10	1	ACF04526	Stuffer sequence u
c 297	4	20.0	10	1	AAZ77770	Human dendritic ce
c 298	4	20.0	10	1	AAZ77870	Human dendritic ce
c 299	4	20.0	10	1	AAZ79551	Human dendritic ce
c 300	4	20.0	10	1	AAZ81919	Metastatic breast
c 301	4	20.0	10	1	AAZ84193	Metastatic breast
c 302	4	20.0	10	1	AAZ83418	Metastatic breast
c 303	4	20.0	10	1	AAZ82784	Metastatic breast
c 304	4	20.0	10	1	AAZ85983	Metastatic breast
c 305	4	20.0	10	1	AAZ86535	Metastatic breast
c 306	4	20.0	10	1	AAZ81064	Metastatic breast
c 307	4	20.0	10	1	AAZ81128	Metastatic breast
c 308	4	20.0	10	1	AAZ83682	Metastatic breast
c 309	4	20.0	10	1	AAZ83851	Metastatic breast
c 310	4	20.0	10	1	AAZ79914	Human dendritic ce
c 311	4	20.0	10	1	AAZ39102	Yeast NORF gene SA
c 312	4	20.0	10	1	AAF43940	Yeast NORF gene SA
c 313	4	20.0	10	1	AAZ16818	Human apolipoprote
c 314	4	20.0	10	1	ACD09948	Optical nucleic ac
c 315	4	20.0	11	1	AAA87795	Promoter P15B3 tra
c 316	4	20.0	11	1	AAZ07926	Human transcrip tio
c 317	4	20.0	11	1	AAZ99270	P15B4 promoter tra
c 318	4	20.0	11	1	ABQ86415	Human skin stress/
c 319	4	20.0	11	1	ABV67006	Human skin EST 479
c 320	4	20.0	11	1	ABV67092	Human skin EST 487
c 321	4	20.0	11	1	ABV62632	Human skin EST 418
c 322	4	20.0	11	1	ABV65381	Human skin EST 316
c 323	4	20.0	11	1	ABV65314	Human skin EST 310
c 324	4	20.0	11	1	ABV70053	Human skin EST 783
c 325	4	20.0	12	1	ABI113302	Oligonucleotide pr

## ALIGNMENTS

## RESULT 1

AAAL62417						
ID	AAAL62417	standard; DNA; 20 BP.				
XX	XX					
AC	AAAL62417;					
XX	XX					
DT	06-OCT-2003	(first entry)				
XX	XX					
DE	Human ABC transporter MHC I antisense oligonucleotide, ISIS 206598.					
XX	XX					
KW	ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;					
KW	hyperproliferative; autoimmune disorder; antisense gene therapy;					
KW	inflammation; tumour formation; immunosuppressive; antimicrobial; human;					
XX	phosphorothioate backbone; antisense; ss.					
OS	Homo sapiens.					
OS	Synthetic.					
XX	XX					
FT	Key	Location/Qualifiers				
FT	modified_base	1..20				
FT		/tag= a				
FT		/mod_base= OTHER				
FT		/note= "Phosphorothioate backbone; All cytidines are 5-				
FT		methylcytidines"				
FT	modified_base	1..5				
FT		/tag= b				
FT		/mod_base= OTHER				
FT		/note= "2'methoxyethyl nucleotides"				
FT	modified_base	16..20				
FT		/tag= c				
FT		/mod_base= OTHER				
FT		/note= "2'methoxyethyl nucleotides"				
PN	WO2003051309-A2.					
XX	XX					
PD	26-JUN-2003.					
XX	XX					
PF	12-DEC-2002; 2002WO-US040101.					
XX	XX					
PR	17-DEC-2001; 2001US-00024369.					
XX	XX					
PA	(ISIS-) ISIS PHARM INC.					
XX	XX					
PI	Borchers AH, Ward DT, Freier SM;					
XX	XX					
DR	WPI; 2003-577305/54.					
XX	XX					
PT	New antisense compound that hybridizes and inhibits the nucleic acid					
PT	encoding ABC transporter major histocompatibility complex 1, for treating					
PT	diseases or conditions such as a hyperproliferative or autoimmune					
PT	disorder.					
XX	XX					
PS	Claim 3; Page 81; 112pp; English.					
XX	XX					
CC	The invention relates to a compound targetted to a nucleic acid molecule					

CC encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1  
 CC where the compound specifically hybridises with the nucleic acid molecule  
 CC and inhibits expression of ATM or specifically hybridises with at least a  
 CC portion of an active site on the nucleic acid molecule. The invention is  
 CC useful for inhibiting the expression of ATM in cells or tissues. The  
 CC invention is useful for treating an animal with hyperproliferative or  
 CC autoimmune disorder. The invention is useful for diagnostics,  
 CC therapeutics, prophylaxis, as research reagents and kits, for  
 CC distinguishing functions of various members of a biological pathway and  
 CC in antisense gene therapy. The invention is also useful prophylactically  
 CC e.g., to prevent or delay infection, inflammation or tumour formation.  
 CC The present sequence is an antisense oligo targeted to human ABC  
 CC transporter MHC I DNA. This sequence is used to illustrate the method of  
 CC the invention

XX SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 0.12;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTTGGCAGAAG 20  
 Db 1 CCCACCTTCTTGGCAGAAG 20

## RESULT 2

ABA96458  
 ID ABA96458 standard; DNA; 15 BP.

XX AC ABA96458;

XX 03-APR-2002 (first entry)

XX Human IL-2 probe SEQ ID NO 2.

XX Human; IL-2; IL-4; probe; ss.

XX Homo sapiens.

XX JP2001286285-A.

XX 16-OCT-2001.

XX 28-APR-2000; 2000JP-00130793.

XX 04-FEB-2000; 2000JP-00028117.

XX (BUNS-) BUNSHI BIOHONICS KENKYUSHO KK.

XX WPI; 2002-134187/18.

XX Selective separation of live cells expressing a specific gene.

XX Example; Page 9; 65pp; Japanese.

XX The invention relates to selectively separating live cells expressing a  
 CC specific gene and involves introducing a labelling agent which can label  
 CC a specific mRNA in the cells of a live cell group expressing the mRNA.  
 CC The method is used for selectively separating live cells expressing a  
 CC specific gene. The present sequence is that of a human IL-2 probe

XX Sequence 15 BP; 1 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 60.0%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 9.5;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 CTTCTTGGCA 16  
 Db 3 CTTCTTGGCA 14

## RESULT 3

AAF45929/c  
 ID AAF45929 standard; DNA; 15 BP.

XX AC AAF45929;

XX 30-MAR-2001 (first entry)

XX IGFBP2 oligonucleotide #768.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 6; Page 39; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

XX Sequence 15 BP; 4 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 59.0%; Score 11.8; DB 1; Length 15;  
 Best Local Similarity 86.7%; Pred. No. 11;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTTGGGC 15  
 Db 15 CGCAGCTTCTTGGGC 1

## RESULT 4

AAF45927/c  
 ID AAF45927 standard; DNA; 15 BP.

XX

AC AAF45927;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP2 oligonucleotide #766.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 6; Page 39; 20lpp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAP45151 and AAP45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 5 A; 4 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 57.0%; Score 11.4; DB 1; Length 15;  
 Best Local Similarity 92.3%; Pred. No. 14;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3 CACCTTCTTGGGC 15  
 Db 15 CAGCTTCTTGGGC 3  
 RESULT 5  
 AAF45928/c  
 ID AAF45928 standard; DNA; 15 BP.  
 XX  
 AC AAF45928;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX

DE IGFBP2 oligonucleotide #767.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 6; Page 39; 20lpp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAP45151 and AAP45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 5 A; 5 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 57.0%; Score 11.4; DB 1; Length 15;  
 Best Local Similarity 92.3%; Pred. No. 14;  
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3 CACCTTCTTGGGC 15  
 Db 14 CAGCTTCTTGGGC 2  
 RESULT 6  
 ABC34320/c  
 ID ABC34320 standard; DNA; 13 BP.  
 XX  
 AC ABC34320;  
 XX  
 DT 20-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 34337 for detecting SNP TSC0010965.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

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KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 34337; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 55.0%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCACCTTCTT 11
Db 13 CCCACCTTCTT 3
RESULT 7
ABC34321
ID ABC34321 standard; DNA; 13 BP.
XX ABC34321;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 34338 for detecting SNP TSC0010965.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.

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XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 34338; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;
SQ
Query Match 55.0%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCACCTTCTT 11
Db 1 CCCACCTTCTT 11
RESULT 8
ABC45614/C
ID ABC45614 standard; DNA; 13 BP.
XX ABC45614;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 45631 for detecting SNP TSC0013272.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 45631; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

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CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 55.0%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTT 11  
Db 12 CCCACCTTCTT 2

RESULT 9

ABC45615  
ID ABC45615 standard; DNA; 13 BP.

XX AC ABC45615;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 45632 for detecting SNP TSC0013272.

XX SNp; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB0000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.

XX Claim 1; SEQ ID NO 45632; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 55.0%; Score 11; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTT 11  
Db 2 CCCACCTTCTT 12

RESULT 10

AAZ81481/C  
ID AAZ81481 standard; DNA; 10 BP.

XX AC AAZ81481;

XX DT 07-APR-2000 (first entry)

XX DE Metastatic breast tumour cell upregulated transcript tag #715.

XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
KW non-metastatic breast tumour tissue; gene therapy; anticancer;  
KW anti-metastatic; vaccine; diagnosis; ss.

XX OS Homo sapiens.

XX WO9965928-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.

XX PR 19-JUN-1998; 98US-0089997P.

XX PR 19-JUN-1998; 98US-0090039P.

XX PR 19-JUN-1998; 98US-0090040P.

XX PA (GENZ ) GENZYME CORP.

XX PA (ROBE/) ROBERTS B L.

XX PI Roberts BL, Shankara S;

XX WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and  
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
PT treatment of cancer.

XX Claim 1; Page 77; 219pp; English.

XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
CC that are preferentially transcribed in the metastatic breast tumour  
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
CC preferentially transcribed in the primary or non-metastatic breast tumour  
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
CC transcripts can be used for diagnosis, prognosis, monitoring and  
CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
CC by standard immunoassays or hybridisation/amplification reactions. 15  
CC Compounds that modulate expression of the transcripts are potentially  
CC useful for treatment of (metastatic) breast cancer, while promoters from  
CC the transcripts are used to direct expression, in selected cell types, of  
CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
CC particularly an antigen-encoding sequence for use in gene or cell-based  
CC vaccines. Polypeptides encoded by the transcripts are also useful in  
CC vaccines; for diagnosing breast cancer and for raising specific  
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
CC agents. Host cells that produce the polypeptides can be used to expand  
CC and isolate populations of educated, antigen-specific immune effector  
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
CC immunotherapy

XX



XX WO200177384-A2.  
 PN 18-OCT-2001.  
 PD  
 PP 06-APR-2001; 2001WO-IB000713.  
 PR 07-APR-2000; 2000DE-01019173.  
 PA (EPIG-) EPIGENOMICS AG.  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 276163; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, cardiovascular and metabolic disorders. The  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 50.0%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCTT 11  
 DB 1 CCACCTTCTT 10  
 XX  
 RESULT 14  
 ABI171877  
 ID ABI171877 standard; DNA; 12 BP.  
 XX  
 AC ABI171877;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide primer SEQ ID NO 371850 for detecting SNP TSC0059032.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PP 06-APR-2001; 2001WO-IB000713.  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX

DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 371850; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 2 A; 7 C; 0 G; 3 T; 0 U; 0 Other;  
 XX  
 Query Match 50.0%; Score 10; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 23;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCACCTTCTT 10  
 DB 2 CCCACCTTCTT 11  
 XX  
 RESULT 15  
 AAA54180/c  
 ID AAA54180 standard; cDNA; 13 BP.  
 XX  
 AC AAA54180;  
 XX  
 DT 08-FEB-2001 (first entry)  
 XX  
 DE 5' exon-intron junction of exon 3 of BSMAP.  
 XX  
 KW Brain specific membrane anchored protein; BSMAP; dopamine; GABA;  
 KW receptor; agonist; antagonist; central nervous system; CNS;  
 KW brain disease; chromosome 19; CLF-I; depression; dyslexia; dystonia;  
 KW eating disorder; epilepsy; migraine; headache; panic disorder;  
 KW schizophrenia; obsessive disorder; compulsive disorder;  
 KW amyotrophic lateral sclerosis; multiple sclerosis; Alzheimer's disease;  
 KW brain tumour; Huntington's disease; Parkinson's disease; stroke; human;  
 KW exon; intron; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200055317-A1.  
 XX  
 PD 21-SEP-2000.  
 XX  
 PP 16-MAR-2000; 2000WO-IB0000360.  
 XX  
 PR 16-MAR-1999; 99EP-00400636.  
 XX  
 PA (FABR ) FABRE MEDICAMENT SA PIERRE.  
 XX  
 PI Elson G, Bonnefoy J, Gauchat J;  
 XX  
 DR WPI; 2000-638200/61.  
 XX  
 PT Novel nucleic acid encoding Brain-Specific Membrane Anchored Protein  
 PT useful for treating central nervous system associated disorders and  
 PT diseases.  
 XX  
 PS Disclosure; Page 13; 45pp; English.  
 XX

CC Several receptors (dopamine receptors, the 5-HT family of receptors and  
CC GABA receptors) have been shown to be useful targets by agonist and  
CC antagonist compounds to treat and/or prevent CNS disorders. Brain  
CC receptors in general are attractive candidates for finding new therapies  
CC for brain diseases. Human chromosome 19 is a short chromosome with a  
CC relatively high GC content which has been found to be involved in CNS  
CC functions. The gene for type I cytokine receptor homologue CLF-1 was  
CC recently localised to chromosome 19. Unexpectedly seven other exons  
CC coding in the reverse orientation located adjacent to the CLF-1 exons  
CC have also been found. This new gene was designated brain-specific  
CC membrane anchored protein (BSMAP). Antagonistic compounds directed  
CC against BSMAP are useful for preparing medicaments for treating and/or  
CC preventing central nervous system disorders such as depression, dyslexia,  
CC dystonia, eating disorders, epilepsy, migraine, headache, panic disorder,  
CC schizophrenia, obsessive and compulsive disorders, amyotrophic lateral  
CC sclerosis, multiple sclerosis, Alzheimer's disease, brain tumors,  
CC Huntington's disease, Parkinson's disease and stroke

SQ Sequence 13 BP; 3 A; 2 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 50.0%; Score 10; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 26;  
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTTCT 10  
Db 10 CCCACCTTCT 1

RESULT 16  
ABC48640  
ID ABC48640 standard; DNA; 13 BP.  
AC ABC48640;  
XX  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 48657 for detecting SNP TSC0013839.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.  
XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 48657; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 49.0%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 29;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 8 TCTTGGCAGAAG 20  
Db 1 TTTTGGTAGAAG 13

RESULT 17  
ABC48641/c  
ID ABC48641 standard; DNA; 13 BP.  
XX  
AC ABC48641;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 48658 for detecting SNP TSC0013839.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.  
XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.  
XX Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 48658; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 49.0%; Score 9.8; DB 1; Length 13;  
Best Local Similarity 84.6%; Pred. No. 29;  
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 8 TCTTGGCAGAAG 20  
Db 1 TTTTGGTAGAAG 13

```
Db      13 TTTTGGGTAGAAG 1
RESULT 18
ABF26997/c
ID  ABF26997 standard; DNA; 13 BP.
XX
AC  ABF26997;
XX
DT  21-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 126994 for detecting SNP TSC0031788.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
DT  06-APR-2001; 2001WO-IB000713.
XX
DE  Oligonucleotides, useful for diagnosis and cell typing, is
KW  designed to detect single-nucleotide polymorphisms and cytosine
KW  methylation status.
XX
OS  Claim 1; SEQ ID NO 126993; 29pp + Sequence Listing; German.
XX
PN  This invention describes novel oligonucleotide primers or peptide nucleic
XX  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX  and cytosine methylation status in chemically pretreated genomic DNA. The
XX  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX  range of diseases including immune system, gastrointestinal, respiratory,
XX  central nervous system, cardiovascular and metabolic disorders. The
XX  oligomers are also used for detecting cell type differentiation. ABC00010
XX  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX  represent the oligomers described in the invention. NOTE: The sequence
XX  data for this patent did not form part of the printed specification, but
XX  was obtained in electronic format from WIPO at
XX  ftp.wipo.int/pub/published_pct_sequences
XX
PS  Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
XX
CC  Query Match      49.0%; Score 9.8; DB 1; Length 13;
CC  Best Local Similarity 84.6%; Pred. No. 29;
CC  Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY      7 TTCTTGGGCAGAA 19
DB      1 TTGTTGGGAGAA 13
      |||||
RESULT 20
ABK99486/c
ID  ABK99486 standard; DNA; 11 BP.
XX
AC  ABK99486;
XX
DT  21-OCT-2002 (first entry)
XX
DE  Human CYP3A5 gene polymorphic reference DNA sequence #56.
XX
KW  Human; CYP3A5; polymorphism; cancer; cardiovascular disease; diabetes;
KW  AIDS; African American; forensic marker; pharmacological; cytostatic;
KW  antidiabetic; anti-HIV; gene therapy; da.
XX
OS  Homo sapiens.
XX
PN  WO200253775-A2.
XX
PD  11-JUL-2002.
XX
DT  21-DEC-2001; 2001WO-EP015290.
XX
DE  Oligonucleotide SEQ ID NO 126993 for detecting SNP TSC0031788.
XX
```

```
Db      13 TTTTGGGTAGAAG 1
RESULT 18
ABF26997/c
ID  ABF26997 standard; DNA; 13 BP.
XX
AC  ABF26997;
XX
DT  21-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 126994 for detecting SNP TSC0031788.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
DT  06-APR-2001; 2001WO-IB000713.
XX
DE  Oligonucleotides, useful for diagnosis and cell typing, is
KW  designed to detect single-nucleotide polymorphisms and cytosine
KW  methylation status.
XX
OS  Claim 1; SEQ ID NO 126994; 29pp + Sequence Listing; German.
XX
PN  This invention describes novel oligonucleotide primers or peptide nucleic
XX  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX  and cytosine methylation status in chemically pretreated genomic DNA. The
XX  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX  range of diseases including immune system, gastrointestinal, respiratory,
XX  central nervous system, cardiovascular and metabolic disorders. The
XX  oligomers are also used for detecting cell type differentiation. ABC00010
XX  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX  represent the oligomers described in the invention. NOTE: The sequence
XX  data for this patent did not form part of the printed specification, but
XX  was obtained in electronic format from WIPO at
XX  ftp.wipo.int/pub/published_pct_sequences
XX
PS  Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
XX
CC  Query Match      49.0%; Score 9.8; DB 1; Length 13;
CC  Best Local Similarity 84.6%; Pred. No. 29;
CC  Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY      7 TTCTTGGGCAGAA 19
DB      13 TTGTTGGGAGAA 1
      |||||
RESULT 19
ABF26996
ID  ABF26996 standard; DNA; 13 BP.
XX
AC  ABF26996;
XX
DT  21-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 126993 for detecting SNP TSC0031788.
XX
```

```

PR 28-DEC-2000; 2000US-0258684P.
PR 29-DEC-2000; 2000US-0258952P.
PR 16-JAN-2001; 2001EP-00100172.
PR 18-JAN-2001; 2001US-0262859P.
PR 16-AUG-2001; 2001EP-00118884.
PR 16-AUG-2001; 2001US-0312825P.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Wojnowski L, Haberl M, Huestert E;
PI
XX
DR WPI; 2002-583628/62.
XX
PT Novel CYP3A5 polynucleotide useful for diagnosis and treatment of cancer,
PT cardiovascular diseases, diabetes and AIDS, and for identifying
PT polymorphisms.
XX
XX Example 2; Page 53; 138pp; English.
XX
CC The present invention relates to a new CYP3A5 polynucleotide encoding a
CC polypeptide, where the polynucleotide is capable of hybridising to a
CC CYP3A5 gene. The invention is useful in an in vitro method for
CC identifying a polymorphism. The invention is also useful for
CC diagnosing a disorder related to the presence of a molecular variant of a
CC CYP3A5 or susceptibility to such a disorder, where the disorder is
CC cancer, or diseases including cardiovascular diseases, diabetes and AIDS.
CC The invention can further be used for the preparation of a diagnostic
CC composition for diagnosing a disease in a subject having a genome
CC comprising a variant allele of the CYP3A5 gene, where the subject is an
CC African American. The molecules of the invention are as forensic markers
CC and in pharmacological studies. The present nucleic acid sequence
CC represents a human CYP3A5 gene polymorphism reference DNA sequence, as
CC described in the invention
XX
SQ Sequence 11 BP; 4 A; 3 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 47.0%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 8 TCTTGGGCAGA 18
Db 11 TCTTTGGCAGA 1

RESULT 21
AB113302
ID AB113302 standard; DNA; 12 BP.
XX
XX AC AB113302;
XX
XX DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 313275 for detecting SNP TSC0025624.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 313275; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 6 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 47.0%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACCTTCCTT 11
Db 1 CCCACCTTCAT 11

RESULT 22
AB147015/C
ID AB147015 standard; DNA; 12 BP.
XX
XX AC AB147015;
XX
XX DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 346988 for detecting SNP TSC0044863.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 346988; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX

```

CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 12 BP; 4 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 47.0%; Score 9.4; DB 1; Length 12;  
 Best Local Similarity 90.9%; Pred. No. 33;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTT 11  
 |||||  
 Db 12 CCCACCTTCTT 2

## RESULT 23

ABI45565/c  
 ID ABI45565 standard; DNA; 12 BP.

XX

AC ABI45565;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide primer SEQ ID NO 345538 for detecting SNP TSC0044079.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 345538; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 12 BP; 3 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 47.0%; Score 9.4; DB 1; Length 12;  
 Best Local Similarity 90.9%; Pred. No. 33;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTT 11  
 |||||  
 Db 12 CCCACCTTCTT 2

## RESULT 24

ABI69022/c  
 ID ABI69022 standard; DNA; 12 BP.

XX

AC ABI69022;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 368995 for detecting SNP TSC0057391.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 368995; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 12 BP; 3 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 47.0%; Score 9.4; DB 1; Length 12;  
 Best Local Similarity 90.9%; Pred. No. 33;  
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCACCTTCTT 11  
 |||||  
 Db 12 CCCACCTTCTT 2

## RESULT 25

ABH91427  
 ID ABH91427 standard; DNA; 12 BP.

XX

AC ABH91427;

XX 22-FEB-2002 (first entry)

```
XX DE Oligonucleotide primer SEQ ID NO 291420 for detecting SNP TSC0014786.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX PT peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPiG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 291420; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 12 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 47.0%; Score 9.4; DB 1; Length 12;
XX Best Local Similarity 90.9%; Pred. No. 33;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 CCCACCTTCTT 11
XX Db 1 CCTACCTTCTT 11
XX
XX RESULT 26
XX ID ABI61189/c
XX XX
XX AC ABI61189;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide primer SEQ ID NO 361162 for detecting SNP TSC0052480.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
```

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PF 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 361162; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 47.0%; Score 9.4; DB 1; Length 12;
XX Best Local Similarity 90.9%; Pred. No. 33;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 10 TTGGCGCAGAAG 20
XX Db 12 TTGGGCTAGAAG 2
XX
XX RESULT 27
XX ID ABH98731
XX XX
XX AC ABH98731;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide primer SEQ ID NO 298724 for detecting SNP TSC0018250.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
```



XX Claim 1; SEQ ID NO 298724; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC000010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 12 BP; 2 A; 7 C; 0 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 47.0%; Score 9.4; DB 1; Length 12;  
Best Local Similarity 90.9%; Pred. No. 33;  
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1 CCCACCTTCTT 11  
Db 1 CCCACCTTCTT 11  
RESULT 28  
ABH85586/c  
ID ABH85586 standard; DNA; 12 BP.  
XX  
AC ABH85586;  
XX  
XX 22-FEB-2002 (first entry)  
XX  
XX Oligonucleotide primer SEQ ID NO 285579 for detecting SNP TSC0012359.  
XX  
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200177384-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 06-APR-2001; 2001WO-IB000713.  
XX  
XX 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
PI  
XX  
XX WPI; 2001-657177/75.  
DR  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 285579; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC000010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 47.0%; Score 9.4; DB 1; Length 12;  
Best Local Similarity 90.9%; Pred. No. 33;  
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1 CCCACCTTCTT 11  
Db 12 CCCCTCTTCTT 2  
RESULT 29  
AAZ77982/c  
ID AAZ77982 standard; DNA; 10 BP.  
XX  
AC AAZ77982;  
XX  
XX 10-APR-2000 (first entry)  
XX  
XX Human dendritic cell SAGE tag, SEQ ID NO:410.  
XX  
XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
KW APC; monocyte-derived dendritic cell; differential gene expression;  
KW immunostimulatory cofactor; costimulatory factor; CTL;  
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9965924-A2.  
XX  
XX 23-DEC-1999.  
XX  
XX 18-JUN-1999; 99WO-US013800.  
XX  
XX 19-JUN-1998; 98US-0089833P.  
PR 19-JUN-1998; 98US-0089844P.  
PR 19-JUN-1998; 98US-0089853P.  
PR 19-JUN-1998; 98US-0089878P.  
PR 19-JUN-1998; 98US-0089911P.  
PR 19-JUN-1998; 98US-0089922P.  
PR 19-JUN-1998; 98US-0089933P.  
PR 19-JUN-1998; 98US-0089944P.  
PR 19-JUN-1998; 98US-0089977P.  
PR 19-JUN-1998; 98US-0089999P.  
PR 19-JUN-1998; 98US-0090000P.  
PR 19-JUN-1998; 98US-0090035P.  
PR 19-JUN-1998; 98US-0090036P.  
PR 19-JUN-1998; 98US-0090039P.  
PR 19-JUN-1998; 98US-0090040P.  
PR 19-JUN-1998; 98US-0090041P.  
PR 19-JUN-1998; 98US-0090042P.  
PR 19-JUN-1998; 98US-0090043P.  
PR 19-JUN-1998; 98US-0090044P.  
PR 19-JUN-1998; 98US-0090045P.  
PR 19-JUN-1998; 98US-0090047P.  
PR 19-JUN-1998; 98US-0090048P.  
PR 19-JUN-1998; 98US-0090072P.  
PR 19-JUN-1998; 98US-0090076P.  
PR 19-JUN-1998; 98US-0090077P.  
PR 19-JUN-1998; 98US-0090078P.  
PR 19-JUN-1998; 98US-0090079P.  
PR 19-JUN-1998; 98US-0090080P.  
PR 08-DEC-1998; 98US-0111715P.  
XX  
XX (GENZ ) GENZYME CORP.  
PA (ROBE/) ROBERTS B L.  
PA (SHAN/) SHANKARA S.  
XX  
XX Roberts BL, Shankara S;  
XX

DR WPI; 2000-106077/09.

XX Isolated polynucleotides differentially expressed in antigen-presenting

PT cells, useful in gene vaccines against cancer.

PT Claim 1; Page 76; 130pp; English.

XX Sequences AA27573-279709 represent SAGE (serial analysis of gene

CC expression) tags used to identify mRNA transcripts encoding

CC immunostimulatory cofactor proteins which are preferentially or

CC differentially expressed in monocyte-derived dendritic cells compared

CC with monocytes. Some of the transcripts correspond to known genes or ESTs

CC (expressed sequence tags) which were previously unknown to be

CC preferentially or differentially expressed in dendritic cells, while

CC other transcripts correspond to novel genes. Antigen-presenting cell

CC (APC)-associated costimulatory factors play an important role in the

CC activation of the cytotoxic immune response, particularly against tumour

CC cells. Tumour antigen presentation via the MHC (major histocompatibility

CC complex) and subsequent recognition by T-cell receptors is alone

CC insufficient to activate a robust cytotoxic immune response that can lyse

CC the tumour cells, immunostimulatory cofactors also being required for

CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid

CC sequences identified using the SAGE tags have several potential uses.

CC They may be used in vaccines to induce an immune response, particularly

CC against a tumour antigen; to modulate the genotype of an APC; to screen

CC for agents that modulate expression of differentially expressed genes in

CC an APC; and as hybridisation probes/amplification primers for the

CC diagnosis, prognosis and monitoring of diseases related to abnormal

CC expression of these genes. Detection of the dendritic cell differentially

CC expressed genes, or of their encoded proteins, can be used to identify

CC cells as belonging to the monocyte lineage. Cells containing these genes

CC can be used in active immunotherapy (or to stimulate production of a

CC population of antigen-specific effector cells) and vectors containing

CC them are used in gene therapy. Co-administration of tumour antigens and

CC APC-associated costimulatory factors ensures adequate antigen

CC presentation to endogenous APCs and upregulates the APCs for the

CC secretion of co-stimulatory signals, migration to T cell-rich sites,

CC recruitment of T cell growth factors and secretion of chemokines for

CC recruitment of immune effector cells

XX Sequence 10 BP; 2 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

SQ

Query Match 45.0%; Score 9; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 33;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTTC 9

Db 9 CCCACCTTC 1

RESULT 30

AA278502/c

ID AA278502 standard; DNA; 10 BP.

XX AA278502;

AC

DT 10-APR-2000 (first entry)

XX

DE Human dendritic cell SAGE tag, SEQ ID NO:930.

XX

KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;

KW APC; monocyte-derived dendritic cell; differential gene expression;

KW immunostimulatory cofactor; costimulatory factor; CTL;

KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

XX Homo sapiens.

OS

XX WO9965924-A2.

PN

XX 23-DEC-1999.

PD

XX 18-JUN-1999; 99WO-US013800.

PF

XX 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-0089911P.

PR 19-JUN-1998; 98US-0089922P.

PR 19-JUN-1998; 98US-0089933P.

PR 19-JUN-1998; 98US-0089944P.

PR 19-JUN-1998; 98US-0089977P.

PR 19-JUN-1998; 98US-0089999P.

PR 19-JUN-1998; 98US-0090000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090047P.

PR 19-JUN-1998; 98US-0090048P.

PR 19-JUN-1998; 98US-0090072P.

PR 19-JUN-1998; 98US-0090076P.

PR 19-JUN-1998; 98US-0090077P.

PR 19-JUN-1998; 98US-0090078P.

PR 19-JUN-1998; 98US-0090079P.

PR 19-JUN-1998; 98US-0090080P.

PR 08-DEC-1998; 98US-0111715P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX

PI Roberts BL, Shankara S;

PI WPI; 2000-106077/09.

DR

XX Isolated polynucleotides differentially expressed in antigen-presenting

PT cells, useful in gene vaccines against cancer.

XX Claim 1; Page 92; 130pp; English.

XX Sequences AA27573-279709 represent SAGE (serial analysis of gene

FS expression) tags used to identify mRNA transcripts encoding

FS immunostimulatory cofactor proteins which are preferentially or

CC differentially expressed in monocyte-derived dendritic cells compared

CC with monocytes. Some of the transcripts correspond to known genes or ESTs

CC (expressed sequence tags) which were previously unknown to be

CC preferentially or differentially expressed in dendritic cells, while

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CC activation of the cytotoxic immune response, particularly against tumour

CC cells. Tumour antigen presentation via the MHC (major histocompatibility

CC complex) and subsequent recognition by T-cell receptors is alone

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CC sequences identified using the SAGE tags have several potential uses.

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CC against a tumour antigen; to modulate the genotype of an APC; to screen

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CC an APC; and as hybridisation probes/amplification primers for the

CC diagnosis, prognosis and monitoring of diseases related to abnormal

CC expression of these genes. Detection of the dendritic cell differentially

CC expressed genes, or of their encoded proteins, can be used to identify

CC cells as belonging to the monocyte lineage. Cells containing these genes

CC can be used in active immunotherapy (or to stimulate production of a

CC population of antigen-specific effector cells) and vectors containing

CC them are used in gene therapy. Co-administration of tumour antigens and

CC APC-associated costimulatory factors ensures adequate antigen

CC presentation to endogenous APCs and upregulates the APCs for the

CC secretion of co-stimulatory signals, migration to T cell-rich sites,

CC recruitment of T cell growth factors and secretion of chemokines for

CC recruitment of immune effector cells

CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX Sequence 10 BP; 2 A; 4 C; 1 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 45.0%; Score 9; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 11 TGGGCAGAA 19  
 Db 10 TGGGCAGAA 2  
 RESULT 31  
 AAZ78603/c  
 ID AAZ78803 standard; DNA; 10 BP.  
 XX AC AAZ78803;  
 XX DT 10-APR-2000 (first entry)  
 XX DE Human dendritic cell SAGE tag, SEQ ID NO:1231.  
 KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX OS Homo sapiens.  
 XX WO9965924-A2.  
 XX PD 23-DEC-1999.  
 XX PF 18-JUN-1999; 99WO-US013800.  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-0089991P.  
 PR 19-JUN-1998; 98US-0089992P.  
 PR 19-JUN-1998; 98US-0089993P.  
 PR 19-JUN-1998; 98US-0089994P.  
 PR 19-JUN-1998; 98US-0089997P.  
 PR 19-JUN-1998; 98US-0089999P.  
 PR 19-JUN-1998; 98US-0090000P.  
 PR 19-JUN-1998; 98US-0090035P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX (GENZ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B. L.  
 PA (SHAN/) SHANKARA S.  
 XX Roberts BL, Shankara S;  
 PI

XX WPI; 2000-106077/09.  
 DR Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 XX Claim 1; Page 100; 130pp; English.  
 PS Sequences AAZ77573-279709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX SQ Sequence 10 BP; 3 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 Db 10 CCACCTTCT 2  
 RESULT 32  
 AAZ82426/c  
 ID AAZ82426 standard; DNA; 10 BP.  
 XX AC AAZ82426;  
 XX DT 07-APR-2000 (first entry)  
 XX DE Metastatic breast tumour cell upregulated transcript tag #1660.  
 KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
 KW non-metastatic breast tumour tissue; gene therapy; anticancer;  
 KW antimetastatic; vaccine; diagnosis; ss.  
 XX OS Homo sapiens.  
 XX WO9965928-A2.  
 XX PD 23-DEC-1999.  
 XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.  
 XX PR 19-JUN-1998; 98US-0089997P.  
 XX PR 19-JUN-1998; 98US-0090039P.  
 XX PR 19-JUN-1998; 98US-0090040P.  
 XX PR 19-JUN-1998; 98US-0090041P.  
 XX (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX Roberts BL, Shankara S;  
 PI WPI; 2000-106079/09.  
 XX Isolated polynucleotides differentially expressed between metastatic and  
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
 PT treatment of cancer.  
 XX Claim 1; Page 103; 219pp; English.  
 XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
 CC that are preferentially transcribed in the metastatic breast tumour  
 CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
 CC preferentially transcribed in the primary or non-metastatic breast tumour  
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
 CC transcripts can be used for diagnosis, prognosis, monitoring and  
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
 CC by standard immunoassays or hybridisation/amplification reactions.  
 CC Compounds that modulate expression of the transcripts are potentially  
 CC useful for treatment of (metastatic) breast cancer, while promoters from  
 CC the transcripts are used to direct expression, in selected cell types, of  
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
 CC particularly an antigen-encoding sequence for use in gene or cell-based  
 CC vaccines. Polypeptides encoded by the transcripts are also useful in  
 CC vaccines; for diagnosing breast cancer and for raising specific  
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
 CC agents. Host cells that produce the polypeptides can be used to expand  
 CC and isolate populations of educated, antigen-specific immune effector  
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
 CC immunotherapy  
 XX  
 SQ Sequence 10 BP; 1 A; 5 C; 1 G; 3 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 12 GGGCAGAAG 20  
 Db 10 GGGCAGAAG 2  
 |||||  
 RESULT 33  
 AAF42275/c  
 ID AAF42275 standard; DNA; 10 BP.  
 XX AAF42275;  
 XX 23-MAR-2001 (first entry)  
 XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:9014.  
 XX Yeast: Saccharomyces cerevisiae; Characterisation; cell cycle; NORF;  
 KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
 KW serial analysis of gene expression; antifungal; tag; identification;  
 KW linker; PCR primer; ds.  
 XX Saccharomyces cerevisiae.  
 OS  
 XX WO200077214-A2.  
 PN

PD 21-DEC-2000.  
 XX 14-JUN-2000; 2000WO-US016223.  
 XX 16-JUN-1999; 99US-00335032.  
 XX (UYJO ) UNIV JOHNS HOPKINS.  
 XX Velculescu V, Vogelstein B, Kinzler K;  
 PI WPI; 2001-061874/07.  
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of  
 PT gene expression (SAGE) tags, useful for studying, monitoring and  
 PT affecting phases of the cell cycle.  
 XX Example; Page 321; 419pp; English.  
 XX The present invention describes an isolated DNA molecule comprising a  
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
 CC previously assigned open reading frame; or nonannotated ORF) genes  
 CC comprising a SAGE (serial analysis of gene expression) tag. Also  
 CC described are: (1) a method (M1) of using NORF genes to affect the cell  
 CC cycle comprising administering a NORF gene whose expression varies by at  
 CC least 10% between any two phases of the cell cycle selected from log  
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
 CC cell; and (b) monitoring expression of a NORF gene whose expression  
 CC varies as in M1, where a test substance which modifies the expression of  
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
 CC identifying human genes which are involved in cell cycle progression  
 CC comprising contacting human DNA with a probe which comprises at least 10  
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
 CC and (4) a method (M4) for identifying a candidate drug as a member of a  
 CC class of drugs having a characteristic effect on gene expression in a  
 CC yeast cell comprising contacting a yeast cell with a candidate drug and  
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
 CC expression is affected by the class of drugs. The NORF genes may be used  
 CC to study, monitor and affect phases of the cell cycle, the differentially  
 CC expressed genes may be used as markers of phases of the cell cycle. The  
 CC methods may be used to identify candidate drugs which affect the cell  
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064  
 CC represent SAGE tags used in the exemplification of the present invention.  
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
 CC method, in the exemplification of the present invention  
 XX  
 SQ Sequence 10 BP; 4 A; 1 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 ACCTTCTTG 12  
 Db 10 ACCTTCTTG 2  
 |||||  
 RESULT 34  
 ABT14287  
 ID ABT14287 standard; DNA; 10 BP.  
 XX ABT14287;  
 XX 20-FEB-2003 (first entry)  
 XX Nucleic acid PCR amplification method-related RAPD PCR primer #57.  
 DE Nucleic acid amplification; nucleic acid analysis; DNA analysis; ss;  
 KW RNA analysis; RAPD; PCR; primer; random amplified polymorphic DNA..  
 XX Unidentified.  
 OS  
 XX WO200281743-A2.  
 PN

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XX 17-OCT-2002.
XX 28-MAR-2002; 2002WO-GB001489.
XX 02-APR-2001; 2001GB-00008182.
XX (HAMI/) HAMILL B.
XX Hamill B;
XX WPI; 2003-075484/07.
XX Amplification of nucleotide sequences from polynucleotides by chain
PT extension of oligonucleotide primers, comprises 2 oligonucleotides in
PT solution, 2 attached to supports and both share complementary sequences.
XX Disclosure; Fig 17; 60pp; English.
XX The invention comprises a method for the PCR amplification of nucleic
CC acids. The method involves a set of primers, where two of the primers are
CC in solution and at least two other primers are attached to a solid
CC support. The method of the invention can be used for the analysis of a
CC nucleic acid or a mixture of nucleic acids, including: single-stranded
CC DNA molecules, double-stranded DNA molecules and mRNA molecules. The
CC present DNA sequence represents a random amplified polymorphic DNA (RAPD)
CC PCR primer of the invention
XX
XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
SQ
Query Match 45.0%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 8 TCTTGGGCA 16
DB 2 TCTTGGGCA 10
RESULT 35
AAS07795
ID AAS07795 standard; DNA; 11 BP.
XX
XX AAS07795;
XX
XX 28-NOV-2000 (first entry)
XX
XX Promoter P15B3 transcription factor binding site SEQ ID #159.
XX
XX Human; secreted protein; forensic procedure; gene therapy;
KW chromosome mapping; cancer; autoimmune disease; cardiovascular disorder;
KW cystic fibrosis; hypothyroidism; immunological disorder; amyloidosis;
KW brain disorder; skeletal muscle disorder; eye disorder; obesity;
KW mitochondrialopathy; diabetes; atherosclerosis; Alzheimer's disease;
KW neurodegenerative disorder; graft rejection; dementia; hyperlipidaemia;
KW septic shock; impotence; promoter; P15B3; ds.
XX
XX Homo sapiens.
XX
XX WO200037491-A2.
XX
XX 29-JUN-2000.
XX
XX 20-DEC-1999; 99WO-IB002058.
XX
XX 22-DEC-1998; 98US-0113686P.
XX 25-JUN-1999; 99US-0141032P.
XX (GEST ) GENSET.
XX
XX Bougueleret L, Dumas J, Duclert A;
XX
XX WPI; 2000-442637/38.

```

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XX Polynucleotides and polypeptides encoding proteins with signal peptides,
PT useful in diagnostic, forensic, gene therapy and chromosome mapping
PT procedures.
XX
XX Example 48; Fig 5; 306pp; English.
XX
XX This sequence represents a transcription factor binding site identified
CC in the human P15B3 promoter. The invention relates to sequences AAS07725-
CC A87774 which encode human secreted proteins AAB25763-B25812. The proteins
CC include signal peptides. The P15B3 promoter is used in the isolation of
CC the cDNAs of the invention. Included in the invention are a host cell
CC containing one of the cDNA sequences, and a purified antibody capable of
CC binding to one of the secreted proteins. Also contained in the invention
CC are methods for storing the sequence data on a computer system, and a
CC method for identifying features of the cDNA sequences using a computer
CC programme. The cDNAs are useful for expressing secreted proteins or
CC fragments to obtain antibodies capable of specifically binding to the
CC secreted proteins. The cDNAs may also be useful in diagnostic, forensic,
CC gene therapy and chromosome mapping procedures and may be used to design
CC expression vectors and secretion vectors. The proteins of the invention
CC may be used to treat diseases including cancer, autoimmune diseases,
CC cardiovascular disorders, cystic fibrosis, hypothyroidism, immunological
CC disorders, amyloidosis, brain disorders, skeletal muscle disorders, eye
CC disorders, obesity, mitochondrialopathies, diabetes, atherosclerosis,
CC neurodegenerative disorders, graft rejection, Alzheimer's disease,
CC dementia, hyperlipidaemia, septic shock and impotence
XX
XX Sequence 11 BP; 1 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 45.0%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCACCTTC 9
DB 2 CCCACCTTC 10
RESULT 36
AAS07926
ID AAS07926 standard; DNA; 11 BP.
XX
XX AAS07926;
XX
XX 23-OCT-2001 (first entry)
XX
XX Human transcription factor binding site from promoter P15B4 #5.
XX
XX Human; expressed sequence tag; EST; ds; promoter P15B4;
KW acute myocardial infarction; acute ischaemic stroke; diabetes; anaemia;
KW growth hormone deficiency; hepatitis; kidney carcinoma;
KW multiple sclerosis; chemotherapy-induced neutropaenia;
KW transcription factor binding site.
XX
XX Homo sapiens.
XX
XX EP1104808-A1.
XX
XX 06-JUN-2001.
XX
XX 27-JUL-2000; 2000EP-00202699.
XX
XX 05-AUG-1999; 99US-0147499P.
XX (GEST ) GENSET.
XX
XX Dumas Milne Edwards J, Jobert S, Giordano J;
XX WPI; 2001-357986/38.
XX
XX New purified 5' expressed sequence tags useful in diagnostic, forensic,
PT gene therapy or chromosome mapping procedures, or for distinguishing

```

PT human tissues or cells from non-human tissues or cells.  
 XX Example 53; Fig 5; 90pp; English.  
 PS  
 CC The sequence represents a transcription factor binding site from human  
 CC promoter p1594, the promoter and binding site being isolated using  
 CC sequence from one of the 5' expressed sequence tags (EST) of the  
 CC invention, one of 15442 nucleotide sequences not given in the  
 CC specification. The 5' EST may be used to efficiently identify and isolate  
 CC 5'untranslated regions (UTRs) and upstream regulatory regions which  
 CC control the location, developmental stage, rate and quantity of protein  
 CC synthesis, as well as the stability of the mRNA. ESTs containing the 5'  
 CC ends of protein genes may include sequences for chromosome mapping and  
 CC identification individuals. The EST may further be used to distinguish  
 CC human tissues or cells from non-human tissues or cells, to distinguish  
 CC between human tissues or cells that do not and do not express  
 CC polynucleotides comprising the 5' EST sequences, to obtain and express  
 CC cDNA clones which include full protein coding sequences of the  
 CC corresponding gene products, to map and clone promoter regions, and open  
 CC reading frames from a genomic sequence, and to obtain and express  
 CC extended cDNAs encoding portions of the protein. EST-related nucleic  
 CC acids are useful in forensic procedures or in diagnosis of genetic  
 CC diseases resulting from abnormal gene expression, for constructing a high  
 CC resolution map of human chromosomes, and in gene therapy to control or  
 CC treat genetic diseases. Proteins expressed from the cDNAs may be used in  
 CC treating or controlling a variety of human conditions e.g acute  
 CC myocardial infarction, acute ischaemic stroke, diabetes, anaemia, growth  
 CC hormone deficiency, hepatitis, kidney carcinoma, multiple sclerosis,  
 CC chemotherapy-induced neutropaenia  
 XX  
 SQ Sequence 11 BP; 1 A; 7 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 37;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCACCTTC 9  
 Db 2 CCCACCTTC 10  
 |||||  
 |||||  
 RESULT 37  
 ABV64418  
 ID ABV64418 standard; cDNA; 11 BP.  
 AC  
 XX ABV64418;  
 XX  
 DT 21-OCT-2002 (first entry)  
 XX  
 DE Human skin EST 2204.  
 XX  
 KW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200253774-A2.  
 XX  
 PD 11-JUL-2002.  
 XX  
 PF 20-DEC-2001; 2001WO-EP015179.  
 XX  
 PR 03-JAN-2001; 2001DE-01000127.  
 XX  
 PA (HENK ) HENKEL KGAA.  
 XX  
 PI Petersohn D, Conradt M, Hofmann K;  
 XX  
 DR WPI; 2002-590638/63.  
 XX  
 PS In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.

PT e.g. skin cancer.  
 XX  
 PS Disclosure; Page 86; 1345pp; German.  
 XX  
 CC The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma of sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 SQ Sequence 11 BP; 3 A; 2 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 37;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 12 GGGCAGAAG 20  
 Db 1 GGGCAGAAG 9  
 |||||  
 |||||  
 RESULT 38  
 ABV71839  
 ID ABV71839 standard; cDNA; 11 BP.  
 XX  
 AC ABV71839;  
 XX  
 DT 21-OCT-2002 (first entry)  
 XX  
 DE Human skin EST 9625.  
 XX  
 KW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200253774-A2.  
 XX  
 PD 11-JUL-2002.  
 XX  
 PF 20-DEC-2001; 2001WO-EP015179.  
 XX  
 PR 03-JAN-2001; 2001DE-01000127.  
 XX  
 PA (HENK ) HENKEL KGAA.  
 XX  
 PI Petersohn D, Conradt M, Hofmann K;  
 XX  
 DR WPI; 2002-590638/63.  
 XX  
 PS In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX  
 PS Claim 24; Page 311; 1345pp; German.  
 XX  
 CC The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;

CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 SQ Sequence 11 BP; 3 A; 2 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 37;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 12 GGGCAGAG 20  
 Db 1 GGGCAGAG 9  
 RESULT 39  
 AAK9270  
 ID AAK9270 standard; DNA; 11 BP.  
 XX  
 AC AAK9270;  
 XX  
 DT 31-MAY-2002 (first entry)  
 XX  
 DE P1584 promoter transcription binding site DELTAEP1\_01.  
 XX  
 KW Promoter DNA; diagnostic; forensic; gene therapy; chromosome mapping;  
 KW expression vector; secretion vector; P1584; transcription binding site;  
 KW ss.  
 XX Homo sapiens.  
 OS  
 XX  
 PN CA2343602-A1.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 17-APR-2001; 2001CA-02343602.  
 XX  
 PR 18-APR-2000; 2000US-0197873P.  
 XX  
 PA (GEST ) GENSET.  
 XX  
 PI Dumas Milne Edwards JB, Jobert S, Giordano J, Tanaka H, Bejanin S;  
 XX WPI; 2002-227459/29.  
 DR  
 XX New nucleic acid sequences comprising human expressed sequence tags  
 PT (ESTs), useful in diagnostic, forensic, gene therapy or chromosome  
 PT mapping procedures, or for designing expression vectors and secretion  
 PT vectors.  
 XX  
 PS Disclosure; Fig 5; 163pp; English.  
 XX  
 CC The invention relates to purified nucleic acids, which comprise sequences  
 CC selected from any of more than 50000 sequences not defined in the  
 CC specification. The polynucleotide sequences are useful in making cDNA,  
 CC polypeptides and promoter DNA, and in diagnostic, forensic, gene therapy  
 CC or chromosome mapping procedures. The nucleic acid sequences are also  
 CC useful for designing expression vectors and secretion vectors. This  
 CC polynucleotide sequence represents a P1584 promoter transcription binding  
 CC site of the invention  
 XX  
 SQ Sequence 11 BP; 1 A; 7 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 37;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCACCTTC 9  
 Db 2 CCCACCTTC 10  
 RESULT 40

AAS21210  
 ID AAS21210 standard; DNA; 11 BP.  
 XX  
 AC AAS21210;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Transmissible gastroenteritis virus full length clone, C/DE-1 junction.  
 XX  
 KW Transmissible gastroenteritis virus; TGE; gene transfer;  
 KW recombinant viral genome; gene therapy; artificial chromosome; vaccine;  
 KW ds.  
 XX  
 OS Transmissible gastroenteritis virus.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT mutation replace(6,T)  
 FT misc\_feature /\*tag= a  
 FT /\*tag= b  
 FT /label= Cleavage site  
 FT /note= "Restriction enzyme BglI cleaves at this site  
 FT creating a sticky end"  
 FT mutation replace(10,A)  
 FT /\*tag= C  
 XX WO200190340-A2.  
 XX  
 PD 29-NOV-2001.  
 XX  
 PF 21-MAY-2001; 2001WO-US016554.  
 XX  
 PR 21-MAY-2000; 2000US-0206537P.  
 PR 20-APR-2001; 2001US-0285320P.  
 XX  
 PA (UYNC-) UNIV NORTH CAROLINA.  
 XX  
 PI Baric RS, Yount B;  
 XX WPI; 2002-114288/15.  
 DR  
 XX Directionally assembling a recombinant viral genome, useful for  
 PT manipulating the genomes of plants, animals, bacteria or viruses for gene  
 PT therapy, by ligating the subclones of the viral genome to assemble a  
 PT recombinant viral genome.  
 XX  
 PS Example 7; Page 22; 42pp; English.  
 XX  
 CC The invention describes a method of directionally assembling a  
 CC recombinant viral genome comprising ligating the subclones of the viral  
 CC genome to assemble a recombinant viral genome, particularly coronavirus.  
 CC For directionally assembling a recombinant viral genome. In particular,  
 CC the method is useful for manipulating the genomes of higher plants and  
 CC animals, as well as bacteria and viruses. In particular, the method is  
 CC useful for the precise genetic manipulation of individual chromosomes in  
 CC whole plants and animals and the construction of artificial chromosomes  
 CC for gene therapy. The genomes produced are useful in preparing vaccines  
 CC and expression vectors (e.g., TGE vectors and vaccines), which are useful  
 CC in protocols involving vaccination, gene transfer and gene therapy. This  
 CC sequence represents the interconnecting junction site C/DE-1 used in the  
 CC assembly of the full length transmissible gastroenteritis virus (TGE)  
 CC genome described in the method of the invention  
 XX  
 SQ Sequence 11 BP; 0 A; 4 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 37;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 5 CCTTCTGG 13  
 Db 2 CCTTCTGG 10





PA (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 325561; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
 XX Query Match 45.0%; Score 9; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 41;  
 XX Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3 CACCTTCTT 11  
 DB 11 CACCTTCTT 3  
 |||||  
 RESULT 44  
 ID ABI13144/c  
 ID ABI13144 standard; DNA; 12 BP.  
 XX AC ABI13144;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide primer SEQ ID NO 313117 for detecting SNP TSC0025502.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 313117; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
 XX Query Match 45.0%; Score 9; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 41;  
 XX Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3 CACCTTCTT 11  
 DB 11 CACCTTCTT 3  
 |||||  
 RESULT 44  
 ID ABI13144/c  
 ID ABI13144 standard; DNA; 12 BP.  
 XX AC ABI13144;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide primer SEQ ID NO 313117 for detecting SNP TSC0025502.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 313117; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;  
 XX Query Match 45.0%; Score 9; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 41;  
 XX Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3 CACCTTCTT 9  
 DB 12 CCCACCTTC 4  
 |||||  
 RESULT 45  
 ID ABI48769  
 ID ABI48769 standard; DNA; 12 BP.  
 XX AC ABI48769;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide primer SEQ ID NO 348742 for detecting SNP TSC0045724.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 348742; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 1 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

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Query Match      45.0%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCACCTTC 9
Db 4 CCCACCTTC 12
|||||
|||||

RESULT 46
ABH8612
ID ABH8612 standard; DNA; 12 BP.
XX
AC ABH8612;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 288605 for detecting SNP TSC0013593.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 288605 for detecting SNP TSC0013593.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 288605; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Query Match      45.0%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 CACCTTCTT 11
Db 1 CACCTTCTT 9
|||||
|||||

RESULT 47
ABI67143/c
ID ABI67143 standard; DNA; 12 BP.
```

```
XX ABI67143;
AC
XX 22-FEB-2002 (first entry)
DT
XX Oligonucleotide primer SEQ ID NO 367116 for detecting SNP TSC0056171.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 367116; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match      45.0%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 CACCTTCTT 11
Db 9 CACCTTCTT 1
|||||
|||||

RESULT 48
ABH94365
ID ABH94365 standard; DNA; 12 BP.
XX
XX ABH94365;
AC
XX 22-FEB-2002 (first entry)
DT
XX Oligonucleotide primer SEQ ID NO 294358 for detecting SNP TSC0016077.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
```



CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 12 BP; 3 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTTC 9

DB 11 CCCACCTTC 3

RESULT 51

ABH70993/c  
 ID ABH70993 standard; DNA; 12 BP.

XX  
 AC ABH70993;

XX  
 DT 22-FEB-2002 (first entry)

XX  
 DE Oligonucleotide primer SEQ ID NO 270970 for detecting SNP TSC0002341.

XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX  
 OS Homo sapiens.

XX  
 PN WO200177384-A2.

XX  
 PD 18-OCT-2001.

XX  
 PF 06-APR-2001; 2001WO-IB000713.

XX  
 PR 07-APR-2000; 2000DE-01019173.

XX  
 PA (EPIG-) EPIGENOMICS AG.

XX  
 PI Olek A, Piepenbrock C, Berlin K;

XX  
 WPI; 2001-657177/75.

XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX  
 PS Claim 1; SEQ ID NO 270970; 29pp + Sequence Listing; German.

XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 12 BP; 2 A; 0 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTTC 9

DB 11 CCCACCTTC 3

RESULT 52

ABH88613  
 ID ABH88613 standard; DNA; 12 BP.

XX  
 AC ABH88613;

XX  
 DT 22-FEB-2002 (first entry)

XX  
 DE Oligonucleotide primer SEQ ID NO 288606 for detecting SNP TSC0013593.

XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX  
 OS Homo sapiens.

XX  
 PN WO200177384-A2.

XX  
 PD 18-OCT-2001.

XX  
 PF 06-APR-2001; 2001WO-IB000713.

XX  
 PR 07-APR-2000; 2000DE-01019173.

XX  
 PA (EPIG-) EPIGENOMICS AG.

XX  
 PI Olek A, Piepenbrock C, Berlin K;

XX  
 WPI; 2001-657177/75.

XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX  
 PS Claim 1; SEQ ID NO 288606; 29pp + Sequence Listing; German.

XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences

XX  
 SQ Sequence 12 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCTT 11

DB 1 CACCTTCTT 9

RESULT 53

ABI52693  
 ID ABI52693 standard; DNA; 12 BP.

XX  
 AC ABI52693;

XX  
 DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide primer SEQ ID NO 352666 for detecting SNP TSC0048025.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 352666; 29pp + Sequence Listing; German.  
 PS  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 U; 0 Other;  
 SQ  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 DB 2 CCACCTTCT 10  
 RESULT 54  
 ABI40468/c  
 ID ABI40468 standard; DNA; 12 BP.  
 XX  
 AC ABI40468;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide primer SEQ ID NO 340441 for detecting SNP TSC0041530.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF

XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX Claim 1; SEQ ID NO 340441; 29pp + Sequence Listing; German.  
 PS  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 12 BP; 3 A; 0 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 DB 9 CCACCTTCT 1  
 RESULT 55  
 ABI10163/c  
 ID ABI10163 standard; DNA; 12 BP.  
 XX  
 AC ABI10163;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DT  
 XX Oligonucleotide primer SEQ ID NO 310136 for detecting SNP TSC0023830.  
 DE  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 OS  
 XX WO200177384-A2.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR  
 XX (EPIG-) EPIGENOMICS AG.  
 PA  
 XX Olek A, Piepenbrock C, Berlin K;  
 PI  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 PT  
 XX

PS Claim 1; SEQ ID NO 310136; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 Db 12 CCACCTTCT 4  
 RESULT 56  
 ABH94363  
 ID ABH94363 standard; DNA; 12 BP.  
 AC ABH94363;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DE Oligonucleotide primer SEQ ID NO 294356 for detecting SNP TSC0016077.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 PD 18-OCT-2001.  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIC-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 294356; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 3 A; 6 C; 0 G; 3 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 Db 4 CCACCTTCT 12  
 RESULT 57  
 ABI73341/C  
 ID ABI73341 standard; DNA; 12 BP.  
 AC ABI73341;  
 XX  
 XX 22-FEB-2002 (first entry)  
 DE Oligonucleotide primer SEQ ID NO 373314 for detecting SNP TSC0059971.  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 PD 18-OCT-2001.  
 XX  
 XX 06-APR-2001; 2001WO-IB000713.  
 PF  
 XX 07-APR-2000; 2000DE-01019173.  
 PR (EPIC-) EPIGENOMICS AG.  
 XX  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 DR  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 XX Claim 1; SEQ ID NO 373314; 29pp + Sequence Listing; German.  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 45.0%; Score 9; DB 1; Length 12;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTCT 10  
 Db 9 CCACCTTCT 1

```

RESULT 58
AAD25619
ID AAD25619 standard; DNA; 12 BP.
XX
AC AAD25619;
XX
DT 26-MAR-2002 (first entry)
XX
DE MLLCy5L LNA probe used for haplotyping MLL-AF4/98(+) chimeric gene.
XX
KW Haplotyping; single molecule detection; luminescent marker;
XX genetic marker; MLL-AF4/98(+); locked nucleic acid; LNA; probe; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N,N'-biscarboxypentyl-5, 5'-
FT disulfonatoindodicarbocyanine (Cy5) fluorophore labelled
FT thymine; This base is linked to the label via linker"
FT
FT misc_feature 12
FT /*tag= b
FT /note= "This base is attached to a linker sequence"
XX
XX WO200190418-A1.
XX
XX 29-NOV-2001.
XX
XX 22-MAY-2001; 2001WO-US016394.
XX
XX 22-MAY-2000; 2000US-0206512P.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Cai H, Goodwin PM, Keller RA, Werner JH;
XX
XX WPI; 2002-083123/11.
XX
XX Rapid haplotyping of DNA or RNA segments, comprises labeling at least 2
XX target sites on a segment of DNA or RNA with separate distinguishable
XX luminescent hybridization probes.
XX
XX Example 1; Page 22; 49pp; English.
XX
XX The invention relates to rapid haplotyping a DNA or RNA segment by single
XX molecule detection. The method involves labelling at least 2 target sites
XX on a DNA or RNA segment with separate distinguishable luminescent marker
XX hybridisation probes, where the targets are selected genetic markers and
XX detecting the presence or absence of each luminescent hybridisation probe
XX on each DNA segment to determine the haplotype of each DNA or RNA
XX segment. The method is useful for rapid haplotyping of DNA or RNA
XX segment. The present sequence is a locked nucleic acid (LNA) probe used
XX for haplotyping MLL-AF4/98(+) chimeric gene
XX
XX Sequence 12 BP; 0 A; 3 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 45.0%; Score 9; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 41;
XX Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 TTCTTGGGC 15
DB 2 TTCTTGGGC 10

RESULT 60
AAD25619/c
ID AAT14161 standard; DNA; 10 BP.
XX
XX AAT14161;
XX
XX 29-MAY-1996 (first entry)
XX
XX Cytokine responsive DNA spacer regulatory element.
XX
XX Regulatory element; transcriptional regulatory protein;
XX signalling molecule; DNA spacer; agonist; antagonist; anaemia;
XX gene transcription; inflammation; cytopenia; cancer; ss.
XX
XX Synthetic.

```

XX WO9528482-A2.  
 PN  
 XX  
 PD 26-OCT-1995.  
 PD  
 XX  
 PF 10-APR-1995; 95WO-US0004477.  
 XX  
 PR 14-APR-1994; 94US-00228935.  
 XX  
 PR 27-MAR-1995; 95US-00410780.  
 XX  
 XX (LIGA-) LIGAND PHARM INC.  
 PA  
 XX Seidel HM, Lamb IP;  
 PI  
 XX WPI; 1995-373797/48.  
 XX  
 DR  
 XX DNA spacer regulatory elements responsive to cytokine(s) - for detecting  
 PT the presence of transcriptional regulatory protein in a sample.  
 PT  
 XX  
 PS Claim 7; Page 125; 135pp; English.  
 PS  
 CC The present oligonucleotide comprises a regulatory element TT(Nx)AA,  
 CC where x is 4-7, and the regulatory element binds an activated  
 CC transcriptional regulatory protein in response to a signalling mol., i.e.  
 CC a cytokine. This cytokine responsive DNA spacer regulatory element can be  
 CC used to detect the presence of a transcriptional regulatory protein in a  
 CC sample, and in assays for (ant)agonists of gene transcription. The  
 CC identified cpds. may be used to treat cytokine-induced disease states, or  
 CC to ameliorate disease states caused by cytokine deficiency, e.g.  
 CC inflammation, anaemia, cytopenia and (pre)cancerous conditions  
 CC  
 XX  
 SQ Sequence 10 BP; 4 A; 3 C; 1 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 7 TTCTTGGGCA 16  
 Db |||||  
 10 TTCTTGGGAA 1  
 RESULT 61  
 AAV56888/c  
 ID AAV56888 standard; DNA; 10 BP.  
 XX  
 AC AAV56888;  
 AC  
 XX  
 DT 02-DEC-1998 (first entry)  
 XX  
 DE Regulatory element containing oligonucleotide #47.  
 XX  
 KW Cytokine-responsive regulatory; primer; promoter; detection; isolation;  
 KW transcriptional control; STAT protein; screening; agonist; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US5814517-A.  
 XX  
 XX 29-SEP-1998.  
 PD  
 XX  
 PF 27-MAR-1995; 95US-00410779.  
 XX  
 XX 14-APR-1994; 94US-00228935.  
 XX  
 PA (LIGA-) LIGAND PHARM INC.  
 XX  
 XX Lamb IP, Seidel HM;  
 PI  
 XX WPI; 1998-541763/46.  
 XX  
 DR  
 XX DNA constructs containing cytokine-responsive regulatory elements -  
 PT useful in assays for transcription-regulating proteins or gene  
 PT

PT transcription agonists or antagonists.  
 XX  
 PS Disclosure; Col 12; 58pp; English.  
 XX  
 CC AAV56842-V56976 and AAV61601-V61631 are oligonucleotides used in the  
 CC production of constructs comprising a cytokine-responsive regulatory  
 CC element linked to a promoter which is linked to a heterologous coding  
 CC sequence so that the coding sequence is under the transcriptional control  
 CC of the regulatory element and the promoter, where the regulatory element  
 CC has a nucleotide sequence selected from TTCTTGGGAA, TTANYTAA, and TTCTNYTAA  
 CC where N is A, T, C or G, and Y = 3 or 4. The constructs can be used to  
 CC detect or isolate transcription-regulating proteins, e.g. STAT proteins,  
 CC in a sample by contacting the sample with the construct so that the  
 CC protein binds to the regulatory element, and detecting or separating the  
 CC resulting complex. The cells can be used in screening assays for agonists  
 CC of gene transcription, in which the level of expression of the coding  
 CC sequence is measured in the presence and absence of a test compound or in  
 CC the presence of the corresponding cytokine  
 XX  
 SQ Sequence 10 BP; 4 A; 3 C; 1 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 7 TTCTTGGGCA 16  
 Db |||||  
 10 TTCTTGGGAA 1  
 RESULT 62  
 AAV79653/c  
 ID AAV79653 standard; DNA; 10 BP.  
 XX  
 AC AAV79653;  
 AC  
 XX 10-APR-2000 (first entry)  
 XX  
 DE Human dendritic cell SAGE tag, SEQ ID NO:2081.  
 XX  
 KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9965924-A2.  
 XX  
 PD 23-DEC-1999.  
 XX  
 PF 18-JUN-1999; 99WO-US013800.  
 XX  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-008991P.  
 PR 19-JUN-1998; 98US-008992P.  
 PR 19-JUN-1998; 98US-008993P.  
 PR 19-JUN-1998; 98US-008994P.  
 PR 19-JUN-1998; 98US-008997P.  
 PR 19-JUN-1998; 98US-008999P.  
 PR 19-JUN-1998; 98US-009000P.  
 PR 19-JUN-1998; 98US-0090035P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.



PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
 XX  
 XX WPI; 2000-106077/09.  
 DR  
 XX Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 XX  
 PS Claim 1; Page 124; 130pp; English.  
 XX  
 CC Sequences AA277573-279709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the immune response, particularly  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 2 A; 0 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 CCCACCTCTT 10  
 ||||| |||  
 Db 10 CCCACCTCTT 1  
 RESULT 63  
 AA277834  
 ID AA277834 standard; DNA; 10 BP.  
 XX  
 AC AA277834;  
 XX

DT 10-APR-2000 (first entry)  
 XX Human dendritic cell SAGE tag, SEQ ID NO:262.  
 DE  
 XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9965924-A2.  
 XX  
 XX PD 23-DEC-1999.  
 XX  
 XX PF 18-JUN-1999; 99WO-US013800.  
 XX  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-008991P.  
 PR 19-JUN-1998; 98US-008992P.  
 PR 19-JUN-1998; 98US-008993P.  
 PR 19-JUN-1998; 98US-008994P.  
 PR 19-JUN-1998; 98US-008997P.  
 PR 19-JUN-1998; 98US-008999P.  
 PR 19-JUN-1998; 98US-009000P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
 XX  
 DR WPI; 2000-106077/09.  
 XX  
 PT Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 XX  
 XX Claim 1; Page 71; 130pp; English.  
 XX  
 PS Sequences AA277573-279709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse

CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 TTCTTGGGCA 16  
 | | | | | | | |  
 Db 1 TGGTTGGGCA 10

## RESULT 64

AAZ78009  
 ID AAZ78009 standard; DNA; 10 BP.

XX AAZ78009;

XX 10-APR-2000 (first entry)

XX Human dendritic cell SAGE tag, SEQ ID NO:437.

XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

XX Homo sapiens.

XX WO9965924-A2.

XX 23-DEC-1999.

XX 18-JUN-1999; 99WO-US013800.

XX 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-0089911P.

PR 19-JUN-1998; 98US-0089922P.

PR 19-JUN-1998; 98US-0089933P.

PR 19-JUN-1998; 98US-0089994P.

PR 19-JUN-1998; 98US-0089997P.

PR 19-JUN-1998; 98US-0090000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX Roberts BL, Shankara S;

XX WPI; 2000-106077/09.

XX Isolated polynucleotides differentially expressed in antigen-presenting

XX cells, useful in gene vaccines against cancer.

XX Claim 1; Page 77; 130pp; English.

XX Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene

XX expression) tags used to identify mRNA transcripts encoding

XX immunostimulatory cofactor proteins which are preferentially or

XX differentially expressed in monocyte-derived dendritic cells compared

XX with monocytes. Some of the transcripts correspond to known genes or ESTs

XX (expressed sequence tags) which were previously unknown to be

XX preferentially or differentially expressed in dendritic cells, while

XX other transcripts correspond to novel genes. Antigen-presenting cell

XX (APC)-associated costimulatory factors play an important role in the

XX activation of the cytotoxic immune response, particularly against tumour

XX cells. Tumour antigen presentation via the MHC (major histocompatibility

XX complex) and subsequent recognition by T-cell receptors is alone

XX insufficient to activate a robust cytotoxic immune response that can lyse

XX the tumour cells, immunostimulatory cofactors also being required for

XX efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid

XX sequences identified using the SAGE tags have several potential uses.

XX They may be used in vaccines to induce an immune response, particularly

XX against a tumour antigen; to modulate the genotype of an APC; to screen

XX for agents that modulate expression of differentially expressed genes in

XX an APC; and as hybridisation probes/amplification primers for the

XX diagnosis, prognosis and monitoring of diseases related to abnormal

XX expression of these genes. Detection of the dendritic cell differentially

XX expressed genes, or of their encoded proteins, can be used to identify

XX cells as belonging to the monocyte lineage. Cells containing these genes

XX can be used in active immunotherapy (or to stimulate production of a

XX population of antigen-specific effector cells) and vectors containing

XX them are used in gene therapy. Co-administration of tumour antigens and

XX APC-associated costimulatory factors ensures adequate antigen

XX presentation to endogenous APCs and upregulates the APCs for the

XX presentation of co-stimulatory signals, migration to T cell-rich sites,

XX secretion of T cell growth factors and secretion of chemokines for

XX recruitment of immune effector cells

XX SQ Sequence 10 BP; 1 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTCTTT 11  
 | | | | | | | |

Db 1 CCACCTGCTT 10  
 | | | | | | | |

## RESULT 65

AAZ84938/c

ID AAZ84938 standard; DNA; 10 BP.

XX

AC AAZ84938;

```

XX 07-APR-2000 (first entry)
XX Metastatic breast tumour cell downregulated transcript tag #4172.
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX Homo sapiens.
XX WO9965928-A2.
XX 23-DEC-1999.
XX 18-JUN-1999; 99WO-US013647.
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX Claim 1; Page 170; 219pp; English.
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX Sequence 10 BP; 5 A; 2 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 47;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTGTGGC 15
Db 10 CTTCTGTGC 1
RESULT 66
AAZ85708
ID AAZ85708 standard; DNA; 10 BP.

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XX AAZ85708;
XX 07-APR-2000 (first entry)
XX Metastatic breast tumour cell downregulated transcript tag #4942.
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX Homo sapiens.
XX WO9965928-A2.
XX 23-DEC-1999.
XX 18-JUN-1999; 99WO-US013647.
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX Claim 1; Page 190; 219pp; English.
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX Sequence 10 BP; 0 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 47;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 CTTCTGTGGC 15
Db 1 CTGCTTGGGC 10
RESULT 67

```

AAZ81181	AAZ81181 standard; DNA; 10 BP.	AAZ80869	AAZ80869 standard; DNA; 10 BP.
XX AC	AAZ81181;	XX AC	AAZ80869;
XX DT	07-APR-2000 (first entry)	XX DT	07-APR-2000 (first entry)
XX DE	Metastatic breast tumour cell upregulated transcript tag #415.	XX DE	Metastatic breast tumour cell upregulated transcript tag #103.
XX KW	Human; metastatic breast tumour tissue; breast cancer; tag; primer;	XX KW	Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX KW	non-metastatic breast tumour tissue; gene therapy; anticancer;	XX KW	non-metastatic breast tumour tissue; gene therapy; anticancer;
XX KW	antimetastatic; vaccine; diagnosis; ss.	XX KW	antimetastatic; vaccine; diagnosis; ss.
XX OS	Homo sapiens.	XX OS	Homo sapiens.
XX PN	WO9965928-A2.	XX PN	WO9965928-A2.
XX PD	23-DEC-1999.	XX PD	23-DEC-1999.
XX PF	18-JUN-1999; 99WO-US013647.	XX PF	18-JUN-1999; 99WO-US013647.
XX PR	19-JUN-1998; 98US-0089853P.	XX PR	19-JUN-1998; 98US-0089853P.
XX PR	19-JUN-1998; 98US-0089997P.	XX PR	19-JUN-1998; 98US-0089997P.
XX PR	19-JUN-1998; 98US-0090039P.	XX PR	19-JUN-1998; 98US-0090039P.
XX PR	19-JUN-1998; 98US-0090041P.	XX PR	19-JUN-1998; 98US-0090041P.
XX PA	(GENZ ) GENZYME CORP.	XX PA	(GENZ ) GENZYME CORP.
XX PA	(ROBE/) ROBERTS B L.	XX PA	(ROBE/) ROBERTS B L.
XX PA	(SHAN/) SHANKARA S.	XX PA	(SHAN/) SHANKARA S.
XX PI	Roberts BL, Shankara S;	XX PI	Roberts BL, Shankara S;
XX WPI	WPI; 2000-106079/09.	XX WPI	WPI; 2000-106079/09.
XX PT	Isolated polynucleotides differentially expressed between metastatic and non-metastatic breast cancer cells, useful for diagnosis, prevention and treatment of cancer.	XX PT	Isolated polynucleotides differentially expressed between metastatic and non-metastatic breast cancer cells, useful for diagnosis, prevention and treatment of cancer.
XX PS	Claim 1; Page 69; 219pp; English.	XX PS	Claim 1; Page 61; 219pp; English.
XX CC	AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts that are preferentially transcribed in the metastatic breast tumour tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942 to AAZ86677 represent tags corresponding to distinct transcripts that are preferentially transcribed in the primary or non-metastatic breast tumour tissue (i.e. are downregulated in metastatic breast tumour cells). These transcripts can be used for diagnosis, prognosis, monitoring and treatment of breast cancer, particularly where metastatic. Diagnosis is by standard immunoassays or hybridisation/amplification reactions. Compounds that modulate expression of the transcripts are potentially useful for treatment of (metastatic) breast cancer, while promoters from the transcripts are used to direct expression, in selected cell types, of e.g. therapeutic genes (also ribozymes or antisense sequences), particularly an antigen-encoding sequence for use in gene or cell-based vaccines. Polypeptides encoded by the transcripts are also useful in antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic agents. Host cells that produce the polypeptides can be used to expand and isolate populations of educated, antigen-specific immune effector cells, e.g. cytotoxic T lymphocytes, and these used for adoptive immunotherapy	XX CC	AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts that are preferentially transcribed in the metastatic breast tumour tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942 to AAZ86677 represent tags corresponding to distinct transcripts that are preferentially transcribed in the primary or non-metastatic breast tumour tissue (i.e. are downregulated in metastatic breast tumour cells). These transcripts can be used for diagnosis, prognosis, monitoring and treatment of breast cancer, particularly where metastatic. Diagnosis is by standard immunoassays or hybridisation/amplification reactions. Compounds that modulate expression of the transcripts are potentially useful for treatment of (metastatic) breast cancer, while promoters from the transcripts are used to direct expression, in selected cell types, of e.g. therapeutic genes (also ribozymes or antisense sequences), particularly an antigen-encoding sequence for use in gene or cell-based vaccines. Polypeptides encoded by the transcripts are also useful in antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic agents. Host cells that produce the polypeptides can be used to expand and isolate populations of educated, antigen-specific immune effector cells, e.g. cytotoxic T lymphocytes, and these used for adoptive immunotherapy
XX SQ	Sequence 10 BP; 1 A; 1 C; 4 G; 4 T; 0 U; 0 Other;	XX SQ	Sequence 10 BP; 0 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
Query Match	42.0%; Score 8.4; DB 1; Length 10;	Query Match	42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity	90.0%; Pred. No. 47;	Best Local Similarity	90.0%; Pred. No. 47;
Matches	9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	Matches	9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	8 TCTTGGCAG 17	QY	1 CCCACCTTCT 10
Db	1 TTTTGGCAG 10		

Db 1 CCCCCCTTCT 10

RESULT 69

AAZ79893

ID AAZ79893 standard; DNA; 10 BP.

AC AAZ79893;

XX 10-APR-2000 (first entry)

DT Human dendritic cell preferentially expressed SAGE tag, SEQ ID NO:184.

DE SAGE tag; serial analysis of gene expression; diagnosis;

XX differential gene expression; characterisation; targeted expression;

KW tumour; cancer; immunotherapy; ss.

XX Homo sapiens.

OS

XX WO9966303-A2.

PN 23-DEC-1999.

PD 17-JUN-1999; 99WO-US013820.

XX 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-0089918P.

PR 19-JUN-1998; 98US-0089922P.

PR 19-JUN-1998; 98US-0089933P.

PR 19-JUN-1998; 98US-0089944P.

PR 19-JUN-1998; 98US-0089978P.

PR 19-JUN-1998; 98US-0089999P.

PR 19-JUN-1998; 98US-0090000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090047P.

PR 19-JUN-1998; 98US-0090048P.

PR 19-JUN-1998; 98US-0090072P.

PR 19-JUN-1998; 98US-0090076P.

PR 19-JUN-1998; 98US-0090077P.

PR 19-JUN-1998; 98US-0090078P.

PR 19-JUN-1998; 98US-0090079P.

PR 19-JUN-1998; 98US-0090080P.

PR 08-DEC-1998; 98US-0111715P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B.L.

PA (SHAN/) SHANKARA S.

XX Roberts BL, Shankara S;

XX WPI; 2000-106132/09.

XX New polynucleotide useful in cancer immunotherapy.

PT Claim 1; Page 62; 97pp; English.

XX Sequences AAZ79710-279916 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts which are differentially expressed in a variety of normal or malignant cell types. CC Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in that particular cell type, while other

CC transcripts correspond to novel genes. The invention also provides a nucleotide comprising a promoter sequence derived from one of the differentially expressed genes, which may optionally be operably linked to a foreign nucleotide sequence, and gene delivery vehicles and host cells comprising the polynucleotides of the invention. A nucleotide comprising sequences AAZ79710-279916 may be used in diagnostic procedures to characterise a cell of a specific tissue type and to determine whether it is normal or malignant. They may be used to screen for agents that modulate expression of differentially expressed genes compound. The promoter/foreign gene construct of the invention may be used for targeted expression of the foreign gene in a particular cell type. For example, a promoter derived from a gene preferentially expressed in dendritic cells (antigen-presenting cells, or APCs), may be operably linked to a sequence encoding an immunostimulatory molecule and a sequence encoding an antigen. Such a construct could be transduced into APCs and would be useful for inducing an immune response by educating immune effector cells in vivo, or in cancer immunotherapy

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

SQ

Query Match 42.0%; Score 8.4; DB 1; Length 10;

Best Local Similarity 90.0%; Pred. No. 47;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 TCTTTGGGCA 16

Db 1 TGCTTGGGCA 10

RESULT 70

AAA73656/c

ID AAA73656 standard; DNA; 10 BP.

AC AAA73656;

XX 30-JAN-2001 (first entry)

DT Probe #25 for sequencing by hybridisation.

DE Nucleic acid sequencing; sequencing by hybridisation; SBH; probe; ss.

KW Synthetic.

OS WO200040758-A2.

PN 13-JUL-2000.

PD 06-JAN-2000; 2000WO-US000458.

PF 06-JAN-1999; 99US-0115284P.

PR (HYSE-) HYSEQ INC.

PA Drmanac R, Drmanac S, Kita D, Cooke C, Xu C;

PI WPI; 2000-475839/41.

XX Identifying one or more sequences of a target nucleic acid (NA), useful for parallel analyses, comprises contacting the NA with a set of pools of probes comprising mixture of probes with different information regions.

PT Disclosure; Page 53; 196pp; English.

XX The present sequence is a probe used to demonstrate the method of the invention, which is concerned with the use of pools of probes to enable sequencing by hybridisation, a process known as SBH. Overlapping probes are used which allows the identification of sequences longer than the probe length, and either the target nucleic acid or the probe is labelled. The method of the invention is useful for assembling sequences and in parallel analyses

XX Sequence 10 BP; 2 A; 5 C; 1 G; 2 T; 0 U; 0 Other;

SQ

Query Match	42.0%;	Score 8.4;	DB 1;	Length 10;	
Best Local Similarity	90.0%;	Pred. No. 47;			
Matches	9;	Conservative	0;	Mismatches	1; Indels 0; Gaps 0;
QY	9	CTTGGCAGCA 18			
Db	10	CTTGGGAGCA 1			
RESULT 71					
AAH63873/c					
ID	AAH63873	standard; cDNA; 10 BP.			
XX					
AC	AAH63873;				
XX					
DT	20-SEP-2001	(first entry)			
XX					
DE	Human ubiquitously expressed transcriptome sequence SEQ ID NO: 713.				
XX					
KW	Human; transcriptome; gene expression pattern; cancer; drug screening;				
KW	cancer diagnosis; cell specific gene expression; ss.				
XX					
OS	Homo sapiens.				
XX					
PN	WO200138577-A2.				
XX					
PD	31-MAY-2001.				
XX					
PF	21-NOV-2000; 2000WO-US031922.				
XX					
PR	24-NOV-1999; 99US-00448480.				
XX					
PA	(UYJO ) UNIV JOHNS HOPKINS.				
XX					
PI	Velculescu VE, Vogelstein B, Kinzler KW;				
XX					
DR	WPI; 2001-367706/38.				
XX					
PT	New isolated polynucleotides, useful for identifying specific cell type,				
PT	such as cancer cell, comprises transcriptomes expressed in particular				
PT	cell types.				
XX					
PS	Claim 13; Page 55; 94pp; English.				
XX					
CC	The present invention describes a method of identifying the type of cell				
CC	in a sample, involving determining which of the sequences AAH63161-				
CC	AAH64724 is expressed by the cell. The transcriptomes described in the				
CC	invention are cell-type specific, cancer specific or ubiquitously				
CC	expressed in humans. They can also be used to screen for drugs, reduce				
CC	cancer specific gene expression, standardise expression and restore the				
CC	function of a diseased cell or tissue. The present sequence is one of the				
CC	transcriptomes described in the exemplification of the invention				
XX					
SQ	Sequence 10 BP; 5 A; 2 C; 3 G; 0 T; 0 U; 0 Other;				
Query Match	42.0%;	Score 8.4;	DB 1;	Length 10;	
Best Local Similarity	90.0%;	Pred. No. 47;			
Matches	9;	Conservative	0;	Mismatches	1; Indels 0; Gaps 0;
QY	6	CTTCTTGGGC 15			
Db	10	CTTCTGTGTC 1			
RESULT 72					
AAH43792					
ID	AAH43792	standard; DNA; 10 BP.			
XX					
AC	AAH43792;				
XX					
DT	23-MAR-2001	(first entry)			
XX					
DE	Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:11931.				
Query Match	42.0%;	Score 8.4;	DB 1;	Length 10;	
Best Local Similarity	90.0%;	Pred. No. 47;			
Matches	9;	Conservative	0;	Mismatches	1; Indels 0; Gaps 0;
QY	10	TTGGGCAGAA 19			
Db	1	TTGGGTAGAA 10			
RESULT 73					
AAH34723/c					
ID	AAH34723	standard; DNA; 10 BP.			
XX					
AC	AAH34723;				
XX					

Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF; nor previously assigned open reading frame; nonannotated ORF; SAGE; serial analysis of gene expression; antifungal; tag; identification; linker; PCR primer; ds.

Saccharomyces cerevisiae.

WO200077214-A2.

21-DEC-2000.

14-JUN-2000; 2000WO-US016223.

16-JUN-1999; 99US-00335032.

(UYJO ) UNIV JOHNS HOPKINS.

Velculescu V, Vogelstein B, Kinzler K;

WPI; 2001-061874/07.

Yeast gene coding sequences comprising NORF genes with serial analysis of gene expression (SAGE) tags, useful for studying, monitoring and affecting phases of the cell cycle.

Example; Page 376; 419pp; English.

The present invention describes an isolated DNA molecule comprising a coding sequence of a yeast gene selected from a group of 745 NORF (not previously assigned open reading frame; or nonannotated ORF) genes comprising a SAGE (serial analysis of gene expression) tag. Also described are: (1) a method (M1) of using NORF genes to affect the cell cycle comprising administering a NORF gene whose expression varies by at least 10% between any two phases of the cell cycle selected from log phase, S phase and G2/M; (2) a method (M2) for screening candidate antifungal drugs comprising: (a) contacting a test substance with a yeast cell; and (b) monitoring expression of a NORF gene whose expression varies as in M1, where a test substance which modifies the expression of the yeast gene is a candidate antifungal drug; (3) a method (M3) for identifying human genes which are involved in cell cycle progression comprising contacting human DNA with a probe which comprises at least 10 contiguous nucleotides of a NORF gene whose expression varies as in M1; and (4) a method (M4) for identifying a candidate drug as a member of a class of drugs having a characteristic effect on gene expression in a yeast cell comprising contacting a yeast cell with a candidate drug and monitoring expression in the yeast cell of at least 1 NORF gene whose expression is affected by the class of drugs. The NORF genes may be used to study, monitor and affect phases of the cell cycle, the differentially expressed genes may be used as markers of phases of the cell cycle. The methods may be used to identify candidate drugs which affect the cell cycle and for identification of antifungal drugs. AAF33268 to AAF44064 represent SAGE tags used in the exemplification of the present invention. AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE method, in the exemplification of the present invention

Sequence 10 BP; 3 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;

Best Local Similarity 90.0%; Pred. No. 47;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 10 TTGGGCAGAA 19

Db 1 TTGGGTAGAA 10

RESULT 73

AAH34723/c

ID AAF34723 standard; DNA; 10 BP.

XX

AC AAF34723;

XX

DT 23-MAR-2001 (first entry)  
 XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:1462.  
 DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
 XX nor previously assigned open reading frame; nonannotated ORF; SAGE;  
 KW serial analysis of gene expression; antifungal; tag; identification;  
 KW linker; PCR primer; ds.  
 XX Saccharomyces cerevisiae.  
 OS WO200077214-A2.  
 PN 21-DEC-2000.  
 PD 14-JUN-2000; 2000WO-US016223.  
 PF 16-JUN-1999; 99US-00335032.  
 XX (UYJO ) UNIV JOHNS HOPKINS.  
 PA Velulescu V, Vogelstein B, Kinzler K;  
 XX WPI; 2001-061874/07.  
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of  
 PT gene expression (SAGE) tags, useful for studying, monitoring and  
 PT affecting phases of the cell cycle.  
 XX Example; Page 52; 419pp; English.  
 PS The present invention describes an isolated DNA molecule comprising a  
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
 CC previously assigned open reading frame; or nonannotated ORF) genes  
 CC comprising a SAGE (serial analysis of gene expression) tag. Also  
 CC described are: (1) a method (M1) of using NORF genes to affect the cell  
 CC cycle comprising administering a NORF gene whose expression varies by at  
 CC least 10% between any two phases of the cell cycle selected from log  
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
 CC cell; and (b) monitoring expression of a NORF gene whose expression  
 CC varies as in M1, where a test substance which modifies the expression of  
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
 CC identifying human genes which are involved in cell cycle progression  
 CC comprising contacting human DNA with a probe which comprises at least 10  
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
 CC and (4) a method (M4) for identifying a candidate drug as a member of a  
 CC class of drugs having a characteristic effect on gene expression in a  
 CC yeast cell comprising contacting a yeast cell with a candidate drug and  
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
 CC expression is affected by the class of drugs. The NORF genes may be used  
 CC to study, monitor and affect phases of the cell cycle, the differentially  
 CC expressed genes may be used as markers of phases of the cell cycle. The  
 CC methods may be used to identify candidate drugs which affect the cell  
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064  
 CC represent SAGE tags used in the exemplification of the present invention.  
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
 CC method, in the exemplification of the present invention  
 XX Sequence 10 BP; 4 A; 1 C; 3 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 4 ACCTTCTTGG 13  
 Db | | | | | | | |  
 10 ACCTTCTTAG 1  
 RESULT 74  
 AAF38664/c  
 ID AAF38664 standard; DNA; 10 BP.

XX AAF38664;  
 XX 23-MAR-2001 (first entry)  
 DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5403.  
 DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
 XX nor previously assigned open reading frame; nonannotated ORF; SAGE;  
 KW serial analysis of gene expression; antifungal; tag; identification;  
 KW linker; PCR primer; ds.  
 XX Saccharomyces cerevisiae.  
 OS WO200077214-A2.  
 PN 21-DEC-2000.  
 PD 14-JUN-2000; 2000WO-US016223.  
 PF 16-JUN-1999; 99US-00335032.  
 XX (UYJO ) UNIV JOHNS HOPKINS.  
 PA Velulescu V, Vogelstein B, Kinzler K;  
 XX WPI; 2001-061874/07.  
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of  
 PT gene expression (SAGE) tags, useful for studying, monitoring and  
 PT affecting phases of the cell cycle.  
 XX Example; Page 193; 419pp; English.  
 PS The present invention describes an isolated DNA molecule comprising a  
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
 CC previously assigned open reading frame; or nonannotated ORF) genes  
 CC comprising a SAGE (serial analysis of gene expression) tag. Also  
 CC described are: (1) a method (M1) of using NORF genes to affect the cell  
 CC cycle comprising administering a NORF gene whose expression varies by at  
 CC least 10% between any two phases of the cell cycle selected from log  
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
 CC cell; and (b) monitoring expression of a NORF gene whose expression  
 CC varies as in M1, where a test substance which modifies the expression of  
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
 CC identifying human genes which are involved in cell cycle progression  
 CC comprising contacting human DNA with a probe which comprises at least 10  
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
 CC and (4) a method (M4) for identifying a candidate drug as a member of a  
 CC class of drugs having a characteristic effect on gene expression in a  
 CC yeast cell comprising contacting a yeast cell with a candidate drug and  
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
 CC expression is affected by the class of drugs. The NORF genes may be used  
 CC to study, monitor and affect phases of the cell cycle, the differentially  
 CC expressed genes may be used as markers of phases of the cell cycle. The  
 CC methods may be used to identify candidate drugs which affect the cell  
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064  
 CC represent SAGE tags used in the exemplification of the present invention.  
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
 CC method, in the exemplification of the present invention  
 XX Sequence 10 BP; 4 A; 1 C; 4 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 CCACCTTCTT 11  
 Db | | | | | | | |  
 10 CCACCTTGT 1

RESULT 75  
AAF37520/c  
ID AAF37520 standard; DNA; 10 BP.  
XX AC AAF37520;  
XX DT 23-MAR-2001 (first entry)  
XX XX  
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:4259.  
XX DE  
XX KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
KW serial analysis of gene expression; antifungal; tag; identification;  
KW linker; PCR primer; ds.  
XX OS Saccharomyces cerevisiae.  
XX PN WO200077214-A2.  
XX XX  
XX PD 21-DEC-2000.  
XX PF 14-JUN-2000; 2000WO-US016223.  
XX XX  
XX PR 16-JUN-1999; 99US-00335032.  
XX XX  
XX PA (UYJO ) UNIV JOHNS HOPKINS.  
XX XX  
XX PI Velculescu V, Vogelstein B, Kinzler K;  
XX DR WPI; 2001-061874/07.  
XX XX  
XX PT Yeast gene coding sequences comprising NORF genes with serial analysis of  
PT gene expression (SAGE) tags, useful for studying, monitoring and  
PT affecting phases of the cell cycle.  
XX PS Example; Page 152; 419pp; English.  
XX XX  
XX CC The present invention describes an isolated DNA molecule comprising a  
CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
CC previously assigned open reading frame; or nonannotated ORF) genes  
CC comprising a SAGE (serial analysis of gene expression) tag. Also  
CC described are: (1) a method (M1) of using NORF genes to affect the cell  
CC cycle comprising administering a NORF gene whose expression varies by at  
CC least 10% between any two phases of the cell cycle selected from log  
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
CC cell; and (b) monitoring expression of a NORF gene whose expression  
CC varies as in M1, where a test substance which modifies the expression of  
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
CC identifying human genes which are involved in cell cycle progression  
CC comprising contacting human DNA with a probe which comprises at least 10  
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
CC and (4) a method (M4) for identifying a candidate drug as a member of a  
CC class of drugs having a characteristic effect on gene expression in a  
CC yeast cell comprising contacting a yeast cell with a candidate drug and  
CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
CC expression is affected by the class of drugs. The NORF genes may be used  
CC to study, monitor and affect phases of the cell cycle, the differentially  
CC expressed genes may be used as markers of phases of the cell cycle. The  
CC methods may be used to identify candidate drugs which affect the cell  
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064  
CC represent SAGE tags used in the exemplification of the present invention.  
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
CC method, in the exemplification of the present invention  
XX SQ Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. NO. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 8 TCTTCGGCAG 17  
|||||

Db 10 TCTTCGGCAG 1  
RESULT 76  
AAF37547/c  
ID AAF37547 standard; DNA; 10 BP.  
XX AC AAF37547;  
XX DT 23-MAR-2001 (first entry)  
XX XX  
XX DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:4286.  
XX KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
KW serial analysis of gene expression; antifungal; tag; identification;  
KW linker; PCR primer; ds.  
XX OS Saccharomyces cerevisiae.  
XX PN WO200077214-A2.  
XX XX  
XX PD 21-DEC-2000.  
XX PF 14-JUN-2000; 2000WO-US016223.  
XX XX  
XX PR 16-JUN-1999; 99US-00335032.  
XX XX  
XX PA (UYJO ) UNIV JOHNS HOPKINS.  
XX XX  
XX PI Velculescu V, Vogelstein B, Kinzler K;  
XX DR WPI; 2001-061874/07.  
XX XX  
XX PT Yeast gene coding sequences comprising NORF genes with serial analysis of  
PT gene expression (SAGE) tags, useful for studying, monitoring and  
PT affecting phases of the cell cycle.  
XX PS Example; Page 153; 419pp; English.  
XX XX  
XX CC The present invention describes an isolated DNA molecule comprising a  
CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
CC previously assigned open reading frame; or nonannotated ORF) genes  
CC comprising a SAGE (serial analysis of gene expression) tag. Also  
CC described are: (1) a method (M1) of using NORF genes to affect the cell  
CC cycle comprising administering a NORF gene whose expression varies by at  
CC least 10% between any two phases of the cell cycle selected from log  
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
CC cell; and (b) monitoring expression of a NORF gene whose expression  
CC varies as in M1, where a test substance which modifies the expression of  
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
CC identifying human genes which are involved in cell cycle progression  
CC comprising contacting human DNA with a probe which comprises at least 10  
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
CC and (4) a method (M4) for identifying a candidate drug as a member of a  
CC class of drugs having a characteristic effect on gene expression in a  
CC yeast cell comprising contacting a yeast cell with a candidate drug and  
CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
CC expression is affected by the class of drugs. The NORF genes may be used  
CC to study, monitor and affect phases of the cell cycle, the differentially  
CC expressed genes may be used as markers of phases of the cell cycle. The  
CC methods may be used to identify candidate drugs which affect the cell  
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064  
CC represent SAGE tags used in the exemplification of the present invention.  
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
CC method, in the exemplification of the present invention  
XX SQ Sequence 10 BP; 2 A; 5 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. NO. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;



QY 11 TCGGCAGAG 20  
Db 10 TGGGCTGAAG 1

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACCTTCT 10  
Db 1 CCCACCTTAT 10

RESULT 78  
AAF38830/c  
ID AAF38830 standard; DNA; 10 BP.  
XX  
AC AAF38830;  
XX  
DT 23-MAR-2001 (first entry)  
XX  
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:7658.  
KW Yeast; Saccharomyces cerevisiae; Characterisation; cell cycle; NORF;  
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
KW serial analysis of gene expression; antifungal; tag; identification;  
KW linker; PCR primer; ds.  
XX  
OS Saccharomyces cerevisiae.  
XX  
PN WO200077214-A2.  
XX  
PD 21-DEC-2000.  
XX  
PF 14-JUN-2000; 2000WO-US016223.  
XX  
PR 16-JUN-1999; 99US-00335032.  
XX  
PA (UYJO ) UNIV JOHNS HOPKINS.  
XX  
PI Velculescu V, Vogelstein B, Kinzler K;  
XX  
DR WPI; 2001-061874/07.  
XX

Yeast gene coding sequences comprising NORF genes with serial analysis of  
gene expression (SAGE) tags, useful for studying, monitoring and  
affecting phases of the cell cycle.

Example; Page 273; 419pp; English.

The present invention describes an isolated DNA molecule comprising a  
coding sequence of a yeast gene selected from a group of 745 NORF (not  
previously assigned open reading frame; or nonannotated ORF) genes  
comprising a SAGE (serial analysis of gene expression) tag. Also  
described are: (1) a method (M1) of using NORF genes to affect the cell  
cycle comprising administering a NORF gene whose expression varies by at  
least 10% between any two phases of the cell cycle selected from log  
phase, S phase and G2/M; (2) a method (M2) for screening candidate  
antifungal drugs comprising: (a) contacting a test substance with a yeast  
cell; and (b) monitoring expression of a NORF gene whose expression  
varies as in M1, where a test substance which modifies the expression of  
the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
comprising contacting human DNA with a probe which comprises at least 10  
contiguous nucleotides of a NORF gene whose expression varies as in M1;  
and (4) a method (M4) for identifying a candidate drug as a member of a  
class of drugs having a characteristic effect on gene expression in a  
yeast cell comprising contacting a yeast cell with a candidate drug and  
monitoring expression in the yeast cell of at least 1 NORF gene whose  
expression is affected by the class of drugs. The NORF genes may be used  
to study, monitor and affect phases of the cell cycle, the differentially  
expressed genes may be used as markers of phases of the cell cycle. The  
methods may be used to identify candidate drugs which affect the cell  
cycle and for identification of antifungal drugs. AAF33268 to AAF4064  
represent SAGE tags used in the exemplification of the present invention.  
AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
method, in the exemplification of the present invention

Sequence 10 BP; 2 A; 5 C; 0 G; 3 T; 0 U; 0 Other;

XX  
SQ Sequence 10 BP; 4 A; 0 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2 CCACCTTCTT 11  
| | | | |  
Db 10 CCACATCTT 1  
RESULT 79  
AAF41899/c  
ID AAF41899 standard; DNA; 10 BP.  
XX  
AC AAF41899;  
XX  
DT 23-MAR-2001 (first entry)  
XX  
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:8638.  
XX  
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
KW serial analysis of gene expression; antifungal; tag; identification;  
KW linker; PCR primer; ds.  
XX  
OS Saccharomyces cerevisiae.  
XX  
FN WO200077214-A2.  
XX  
PD 21-DEC-2000.  
XX  
PF 14-JUN-2000; 2000WO-US016223.  
XX  
PR 16-JUN-1999; 99US-00335032.  
XX  
PA (UYJO ) UNIV JOHNS HOPKINS.  
XX  
XX Velculescu V, Vogelstein B, Kinzler K;  
XX WPI; 2001-061874/07.  
XX  
PT Yeast gene coding sequences comprising NORF genes with serial analysis of  
PT gene expression (SAGE) tags, useful for studying, monitoring and  
PT affecting phases of the cell cycle.  
XX  
PS Example; Page 308; 419pp; English.  
XX  
CC The present invention describes an isolated DNA molecule comprising a  
CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
CC previously assigned open reading frame; or nonannotated ORF) genes  
CC comprising a SAGE (serial analysis of gene expression) tag. Also  
CC described are: (1) a method (M1) of using NORF genes to affect the cell  
CC cycle comprising administering a NORF gene whose expression varies by at  
CC least 10% between any two phases of the cell cycle selected from log  
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
CC cell; and (b) monitoring expression of a NORF gene whose expression  
CC varies as in M1, where a test substance which modifies the expression of  
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
CC identifying human genes which are involved in cell cycle progression  
CC comprising contacting human DNA with a probe which comprises at least 10  
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
CC and (4) a method (M4) for identifying a candidate drug as a member of a  
CC class of drugs having a characteristic effect on gene expression in a  
CC yeast cell comprising contacting a yeast cell with a candidate drug and  
CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
CC expression is affected by the class of drugs. The NORF genes may be used  
CC to study, monitor and affect phases of the cell cycle, the differentially  
CC expressed genes may be used as markers of phases of the cell cycle. The  
CC methods may be used to identify candidate drugs which affect the cell  
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064

CC represent SAGE tags used in the exemplification of the present invention.  
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
CC method, in the exemplification of the present invention  
XX  
SQ Sequence 10 BP; 5 A; 2 C; 3 G; 0 T; 0 U; 0 Other;  
Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 6 CTTCTTGGGC 15  
| | | | |  
Db 10 CTTCTTGGTC 1  
RESULT 80  
AAF40814/c  
ID AAF40814 standard; DNA; 10 BP.  
XX  
AC AAF40814;  
XX  
DT 23-MAR-2001 (first entry)  
XX  
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:7553.  
XX  
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
KW serial analysis of gene expression; antifungal; tag; identification;  
KW linker; PCR primer; ds.  
XX  
OS Saccharomyces cerevisiae.  
XX  
FN WO200077214-A2.  
XX  
PD 21-DEC-2000.  
XX  
PF 14-JUN-2000; 2000WO-US016223.  
XX  
PR 16-JUN-1999; 99US-00335032.  
XX  
PA (UYJO ) UNIV JOHNS HOPKINS.  
XX  
XX Velculescu V, Vogelstein B, Kinzler K;  
XX WPI; 2001-061874/07.  
XX  
PT Yeast gene coding sequences comprising NORF genes with serial analysis of  
PT gene expression (SAGE) tags, useful for studying, monitoring and  
PT affecting phases of the cell cycle.  
XX  
PS Example; Page 269; 419pp; English.  
XX  
CC The present invention describes an isolated DNA molecule comprising a  
CC coding sequence of a yeast gene selected from a group of 745 NORF (not  
CC previously assigned open reading frame; or nonannotated ORF) genes  
CC comprising a SAGE (serial analysis of gene expression) tag. Also  
CC described are: (1) a method (M1) of using NORF genes to affect the cell  
CC cycle comprising administering a NORF gene whose expression varies by at  
CC least 10% between any two phases of the cell cycle selected from log  
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate  
CC antifungal drugs comprising: (a) contacting a test substance with a yeast  
CC cell; and (b) monitoring expression of a NORF gene whose expression  
CC varies as in M1, where a test substance which modifies the expression of  
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for  
CC identifying human genes which are involved in cell cycle progression  
CC comprising contacting human DNA with a probe which comprises at least 10  
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;  
CC and (4) a method (M4) for identifying a candidate drug as a member of a  
CC class of drugs having a characteristic effect on gene expression in a  
CC yeast cell comprising contacting a yeast cell with a candidate drug and  
CC monitoring expression in the yeast cell of at least 1 NORF gene whose  
CC expression is affected by the class of drugs. The NORF genes may be used  
CC to study, monitor and affect phases of the cell cycle, the differentially  
CC expressed genes may be used as markers of phases of the cell cycle. The  
CC methods may be used to identify candidate drugs which affect the cell  
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064

CC expressed genes may be used as markers of phases of the cell cycle. The  
 CC methods may be used to identify candidate drugs which affect the cell  
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064  
 CC represent SAGE tags used in the exemplification of the present invention.  
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE  
 CC method, in the exemplification of the present invention

XX SQ Sequence 10 BP; 4 A; 2 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 4 ACCCTCTTGG 13  
 Db 10 AACTCTTGG 1  
 |||||

RESULT 81  
 ABL88354/c  
 ID ABL88354 standard; DNA; 10 BP.  
 XX  
 AC ABL88354;  
 XX  
 DT 20-MAY-2002 (first entry)  
 DE Human CHRNE gene polymorphism detection primer, SEQ ID NO:88.  
 XX  
 KW Human; cholinergic receptor nicotinic epsilon polypeptide; CHRNE;  
 KW chromosome 17p13-12; acetylcholine receptor; ACHR;  
 KW neuromuscular junction; skeletal muscle; postnatal development;  
 KW congenital myasthenic syndrome; CMS; haplotyping; genotyping; haplotype;  
 KW genetic variant; single nucleotide polymorphism; SNP; gene therapy;  
 KW drug screening; primer extension; primer; ss.

XX Homo sapiens.  
 OS  
 XX WO200198316-A2.  
 PN  
 XX 27-DEC-2001.  
 PD  
 PF 20-JUN-2001; 2001WO-US019835.  
 XX  
 XX 20-JUN-2000; 2000US-0212870P.  
 PR  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA  
 XX Amaro E, Bieglecki KM, Kliem SE, Koshy B, Tanguay DA;  
 PI WPI; 2002-130787/17.  
 DR  
 XX Novel genetic variants of cholinergic receptor, nicotinic, epsilon  
 PT polypeptide gene useful in studying expression and function of the  
 PT protein, and for screening drugs to treat diseases e.g. congenital  
 PT myasthenic syndrome.

XX  
 PS Claim 19; Page 15; 104pp; English.  
 XX

CC The invention relates to a method for haplotyping the cholinergic  
 CC receptor, nicotinic, epsilon polypeptide (CHRNE) gene (ABL88268) of an  
 CC individual, and also describes 17 novel polymorphic sites within the  
 CC human CHRNE gene. The CHRNE gene is located on chromosome 17p13-12 and  
 CC contains 12 exons which encode a 493 amino acid protein (AB49112). The  
 CC CHRNE protein is one of the 5 subunits of mammalian acetylcholine  
 CC receptors (ACHRs) found at neuromuscular junctions in juveniles and  
 CC adults, and is essential for the normal postnatal development of skeletal  
 CC muscle. Mutations in the CHRNE gene are associated with congenital  
 CC myasthenic syndrome (CMS). CHRNE gene sequences can therefore be used in  
 CC gene therapy. The CHRNE gene is also useful for studying the expression  
 CC and function of CHRNE, and in expressing CHRNE protein for use in  
 CC screening for candidate drugs to treat diseases related to CHRNE. The  
 CC method of the invention is useful for haplotyping the CHRNE gene in an  
 CC individual, and can also be used in pharmaceutical research to validate

CC CHRNE as a candidate target for, and in design of clinical trials of  
 CC candidate drugs for, treating a specific condition drugs or disease  
 CC predicted to be associated with CHRNE activity such as CMS. Polymorphisms  
 CC in the target region may be determined by the use of allele-specific  
 CC oligonucleotides (ASOs; ABL88370-ABL88370) as probes and primers, and by  
 CC primer extension using oligonucleotide primers comprising sequences  
 CC ABL88371-ABL88354. The CHRNE protein is useful for improving the  
 CC efficiency and reliability of several steps in the discovery and  
 CC development of drugs for treating diseases associated with CHRNE  
 CC activity, and may be used to screen drugs which target CHRNE. Sequences  
 CC ABL88371-ABL88354 represent sequences that are specifically claimed as  
 CC components of primers used to detect polymorphisms in the CHRNE gene by  
 CC primer extension

XX SQ Sequence 10 BP; 3 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 CCCACCTTCT 10  
 Db 10 CCCACCTTCT 1  
 |||||

RESULT 82  
 ABK37010  
 ID ABK37010 standard; DNA; 10 BP.  
 XX  
 AC ABK37010;  
 XX  
 DT 08-MAY-2002 (first entry)  
 DE Human ALAS2 gene allele-specific oligonucleotide PCR primer #9.  
 XX  
 KW Human; aminolevulinate delta synthase 2; ALAS2; haplotyping; primer; ss;  
 KW haplotype pair; single nucleotide polymorphism; genotyping; anemiaemic;  
 KW gene therapy; drug screening; X-linked sideroblastic anaemia; sequencing;  
 KW hypochromic anaemia; probe; PCR.

XX Homo sapiens.  
 OS  
 XX WO200210454-A2.  
 PN  
 XX 07-FEB-2002.  
 PD  
 PF 30-JUL-2001; 2001WO-US023914.  
 XX  
 XX 28-JUL-2000; 2000US-0221827P.  
 PR  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA  
 XX Choi JY, Koshy B, Kliem S, Stephens JC;  
 PI WPI; 2002-188755/24.  
 DR

XX New isolated human aminolevulinate delta synthase 2 polynucleotide,  
 PT useful for therapeutic purposes, for studying the expression and function  
 PT of the polynucleotide, and for expressing the aminolevulinate protein.

XX Claim 18; Page 14; 90pp; English.

CC The invention relates to single nucleotide polymorphisms in the gene  
 CC encoding human aminolevulinate delta synthase 2 (ALAS2). A method for  
 CC haplotyping the ALAS2 gene in an individual comprises identifying the  
 CC nucleotide at one or more polymorphic sites and determining whether one  
 CC of the copies of the gene is defined by one of the ALAS2 haplotypes given  
 CC in the specification or whether both copies are defined by a haplotype  
 CC pair. This method is useful in genotyping, whereby all possible haplotype  
 CC pairs can be assigned to specific genotypes. An association between a  
 CC trait and a haplotype or haplotype pair of the ALAS2 gene can be  
 CC identified by comparing the frequency of the haplotype or haplotype pair  
 CC in a population exhibiting the trait with the frequency of the haplotype

CC or haplotype pair in a reference population, where a higher haplotype  
CC frequency in the trait population indicates the trait is associated with  
CC the haplotype or haplotype pair. ALAS2 and its corresponding DNA are used  
CC for studying the expression and function of ALAS2, for use in screening  
CC for candidate drugs to treat diseases related to ALAS2 activity, such as  
CC X-linked sideroblastic anaemia and hypochromic anaemia. The sequences are  
CC also useful for studying the effect of variation on the biological  
CC activity of ALAS2 as well as on the binding affinity of candidate drugs  
CC targeting ALAS2. Sequences ABK36963-ABK37027 represent allele-specific  
CC oligonucleotide probes, sequencing primers and PCR primers used to detect  
CC ALAS2 gene polymorphisms

XX  
SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 6 CTTCTTGGGC 15  
| | | | | | | |  
Db 1 CATCTTGGGC 10

RESULT 83  
ABL39516/c  
ID ABL39516 standard; DNA; 10 BP.  
XX  
AC ABL39516;  
XX  
XX  
DT 22-APR-2002 (first entry)  
XX  
DE Human EFTFB primer-extension oligonucleotide 22.  
XX  
XX Human; electron-transfer flavoprotein beta polypeptide; EFTFB;  
KW electron acceptor; mitochondrial matrix; glutaric acidemia type II;  
KW novel polymorphic site; novel polymorphism; EFTFB genotype; ss; GAI1;  
KW EFTFB haplotype; transgenic animal; primer; probe; chromosome 19q13;  
KW primer-extension oligonucleotide; single nucleotide polymorphism; SNP.  
XX  
OS Homo sapiens.  
XX  
XX WO200202580-A2.  
FN  
XX  
PD 10-JAN-2002.  
XX  
PF 05-JUL-2001; 2001WO-US021306.  
XX  
PR 05-JUL-2000; 2000US-0215984P.  
XX  
XX (GENA-) GENAISSANCE PHARM INC.  
PA  
XX Bentivegna SC, Bieglecki KM, Kazemi A, Koshy B;  
PI WPI; 2002-154722/20.  
XX  
DR

XX Novel isolated human electron-transfer-flavoprotein, beta polynucleotide,  
PT useful for therapeutic purposes, for studying the expression and function  
PT of the polynucleotide, and for expressing the flavoprotein.  
PT  
XX

PS Claim 19; Page 15; 143pp; English.  
XX  
XX The invention comprises DNA, cDNA and protein sequences of the human  
CC electron-transfer flavoprotein, beta polypeptide (EFTFB) gene (located on  
CC chromosome 19q13.3-13.4). The invention specifically relates to the  
CC identification of 27 novel polymorphic sites within the EFTFB gene.  
CC Electron-transfer flavoprotein (ETF) is an obligatory electron acceptor  
CC for nine primary flavoprotein dehydrogenases and is located in the  
CC mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta  
CC (EFTFB) subunit. Electrons accepted by ETF are transferred to the  
CC mitochondrial respiratory chain by ETF dehydrogenases (ETFDHs).  
CC Deficiency of ETF or ETFDH leads to glutaric acidemia type II (GAI1).  
CC Therefore EFTFB is a pharmaceutically-important gene in the treatment of  
CC GAI1. The novel EFTFB polymorphisms identified in the invention are useful  
CC

CC for genotyping and haplotyping the EFTFB gene of an individual. The EFTFB  
CC protein and nucleic acids of the invention are useful for studying the  
CC expression and function of EFTFB in vivo. The EFTFB protein and nucleic  
CC acids are also useful for testing the efficacy of therapeutic agents and  
CC compounds for glutaric acidemia type II. The nucleic acids of the  
CC invention are useful in the production of a transgenic animal expressing  
CC the EFTFB gene. Nucleic acids ABL39414-ABL39440 represent claimed EFTFB  
CC allele-specific probes. Nucleic acids ABL39441-ABL39494 represent claimed  
CC EFTFB allele-specific PCR primers. Nucleic acids ABL39495-ABL39548  
CC represent claimed EFTFB primer-extension oligonucleotides  
XX  
SQ Sequence 10 BP; 3 A; 5 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 8 TCTTGGGCAG 17  
| | | | | | | |  
Db 10 TCTTGGGCAG 1

RESULT 84  
ABL52253  
ID ABL52253 standard; DNA; 10 BP.  
XX  
AC ABL52253;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Human PHKG2 preferred oligonucleotide primer SEQ ID NO:40.  
XX  
XX Human; phosphorylase kinase gamma 2 (testis); PHKG2; enzyme; SNP;  
KW phosphorylase kinase gamma 2; single nucleotide polymorphism;  
KW polymorphic; hepatotropic; gene therapy; glycogen storage disease;  
KW liver cirrhosis; primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200194365-A2.  
FN  
XX  
PD 13-DEC-2001.  
XX  
PF 11-JUN-2001; 2001WO-US018814.  
XX  
PR 09-JUN-2000; 2000US-0210568P.  
XX  
XX (GENA-) GENAISSANCE PHARM INC.  
PA  
XX Choi JY, Koshy B, Sanchis A, Sausker EA;  
PI WPI; 2002-404359/43.  
XX  
DR  
XX  
XX New variants of phosphorylase kinase gamma 2 isogenes, useful for  
PT improving efficiency and reliability in the development of drugs for  
PT treating diseases e.g. liver cirrhosis.  
XX  
XX Claim 18; Page 14; 76pp; English.

XX  
XX The present invention describes an isolated polynucleotide (I) comprising  
CC a nucleotide sequence which is a polymorphic variant of a reference  
CC sequence for human phosphorylase kinase gamma2 (testis) (PHKG2) gene or  
CC its fragment, or a polymorphic variant of a reference sequence for a  
CC PHKG2 cDNA or its fragment. Also described is an isolated polypeptide  
CC (II) comprising an amino acid sequence which is a polymorphic variant of  
CC a reference sequence for PHKG2 protein or its fragment, where the  
CC reference sequence comprises a sequence (see AB09290) of 406 amino  
CC acids, and the polymorphic variant comprises one or more variant amino  
CC acids selected from glutamic acid at a position corresponding to amino  
CC acid position 153 and tryptophan at position corresponding to amino acid  
CC position 329. (I) has hepatotropic activity and can be used in gene  
CC therapy. (II) is useful in screening for drugs targeting (II), by  
CC contacting a PHKG2 polymorphic variant with a candidate agent and

CC assaying for binding activity. The identified candidate agents targeting  
CC PHKG2, are useful for treating liver cirrhosis and glycogen storage  
CC diseases. The present sequence represents a preferred oligonucleotide  
CC primer for the PHKG2 gene, which is used in the exemplification of the  
CC present invention  
XX  
SQ Sequence 10 BP; 1 A; 7 C; 0 G; 2 T; 0 U; 0 Other;  
Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 CCCACCTTCT 10  
DB 1 CCCACCTTCT 10  
RESULT 85  
ABL52252/c  
ID ABL52252 standard; DNA; 10 BP.  
XX  
AC ABL52252;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Human PHKG2 preferred oligonucleotide primer SEQ ID NO:39.  
XX  
KW Human; phosphorylase kinase gamma 2 (testis); PHKG2; enzyme; SNP;  
KW phosphorylase kinase gamma 2; single nucleotide polymorphism;  
KW polymorphic; hepatotropic; gene therapy; glycogen storage disease;  
KW liver cirrhosis; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200194365-A2.  
XX  
PD 13-DEC-2001.  
XX  
PF 11-JUN-2001; 2001WO-US018814.  
XX  
PR 09-JUN-2000; 2000US-0210568P.  
XX  
PA (GENA-) GENAISANCE PHARM INC.  
XX  
PI Choi JY, Koshy B, Sanchis A, Sausker EA;  
XX  
WPI; 2002-404359/43.  
XX  
New variants of phosphorylase kinase gamma 2 isogenes, useful for  
PT improving efficiency and reliability in the development of drugs for  
PT treating diseases e.g. liver cirrhosis.  
XX  
PS Claim 18; Page 14; 76pp; English.  
XX  
The present invention describes an isolated polynucleotide (I) comprising  
CC a nucleotide sequence which is a polymorphic variant of a reference  
CC sequence for human phosphorylase kinase gamma2 (testis) (PHKG2) gene or  
CC its fragment, or a polymorphic variant of a reference sequence for a  
CC PHKG2 cDNA or its fragment. Also described is an isolated polypeptide  
CC (II) comprising an amino acid sequence which is a polymorphic variant of  
CC a reference sequence for PHKG2 protein or its fragment, where the  
CC acids, and the polymorphic variant comprises one or more variant amino  
CC acids selected from glutamic acid at a position corresponding to amino  
CC acid position 153 and tryptophan at position corresponding to amino acid  
CC position 339. (I) has hepatotropic activity and can be used in gene  
CC therapy. (II) is useful in screening for drugs targeting (II), by  
CC contacting a PHKG2 polymorphic variant with a candidate agent and  
CC assaying for binding activity. The identified candidate agents targeting  
CC PHKG2, are useful for treating liver cirrhosis and glycogen storage  
CC diseases. The present sequence represents a preferred oligonucleotide  
CC primer for the PHKG2 gene, which is used in the exemplification of the  
CC present invention

XX  
SQ Sequence 10 BP; 2 A; 0 C; 7 G; 1 T; 0 U; 0 Other;  
Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1 CCCACCTTCT 10  
DB 10 CCCACCTTCT 1  
RESULT 86  
ABV78454  
ID ABV78454 standard; cDNA; 10 BP.  
XX  
AC ABV78454;  
XX  
DT 29-NOV-2002 (first entry)  
XX  
DE Human transcription factor CA150 SAGE tag, SEQ ID NO:165.  
XX  
KW SAGE tag; serial analysis of gene expression; human; Th1 cell;  
KW activated T cell; T lymphocyte; immune response; expression pattern;  
KW preferential expression; immune disorder; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2002186482-A.  
XX  
PD 02-JUL-2002.  
XX  
PF 19-DEC-2000; 2000JP-00385816.  
XX  
PR 19-DEC-2000; 2000JP-00385816.  
XX  
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX  
WPI; 2002-594261/64.  
XX  
Human activated Th1 and Th2 cell expression gene group, useful for the  
PT diagnosis and treatment of Th1 and Th2-related diseases.  
XX  
PS Claim 19; Page 11; 60pp; Japanese.  
XX  
The invention relates to SAGE (serial analysis of gene expression) tags  
CC representing groups of genes which are expressed in activated human Th1  
CC and/or Th2 cells. The SAGE tags of this invention consist of a sequence  
CC of 10 nucleotides located downstream of the 5'-CATG-3' sequence motif  
CC lying nearest to the polyA region of cDNAs derived from a variety of  
CC genes. These tags serve to uniquely identify each transcript and can thus  
CC be used to analyse the pattern of gene expression in particular cell  
CC types. The invention also relates to proteins encoded by the genes  
CC expressed in Th1 and/or Th2 cells, antibodies against these proteins, and  
CC inhibitors of the expression of groups of genes that are expressed in  
CC either or both the two cell types. Groups of genes expressed in Th1  
CC and/or Th2 cell types may be used for the diagnosis and treatment of Th1  
CC and Th2-related disorders. Sequences ABV78390-ABV78560 are SAGE tags  
CC representing 171 genes which are more highly expressed in Th1 cells  
CC compared with Th2 cells  
XX  
SQ Sequence 10 BP; 3 A; 2 C; 3 G; 2 T; 0 U; 0 Other;  
Query Match 42.0%; Score 8.4; DB 1; Length 10;  
Best Local Similarity 90.0%; Pred. No. 47;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 10 TTGGCCAGAA 19  
DB 1 TTGGCCAGAA 10  
RESULT 87



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PR 24-JAN-2001; 2001US-0263811P.
XX (OWEN/) OWENS G K.
XX (MANA/) MANABE I.
XX Owens GK, Manabe I;
XX WPI; 2002-599772/64.
XX New smooth muscle myosin heavy chain promoter/enhancers, useful for
XX smooth muscle tissue-specific targeting and expression, or for genetic
XX engineering as a means to investigate smooth muscle cell physiology and
XX pathophysiology.
XX Example 4; Page 56; 110pp; English.
XX The present sequence is the CarG2 motif of the promoter/enhancer region
XX of the rat smooth muscle myosin heavy chain (SM-MHC) gene (see also
XX ABN84504). The present invention provides polynucleotide sequences which
XX confer to an operably linked polynucleotide cell-specific expression
XX within SM cells in vivo. These are derived from the rat or human SM-MHC
XX gene. In some, the CarG2 or the intron CarG motif is mutated to confer
XX subtype specificity. For example, the present sequence is preferably
XX altered to the sequence given in ABN84507 by site-directed mutagenesis.
XX The heterologous polynucleotide linked to the SM-MHC promoter preferably
XX encodes a toxin, a prodrug-converting enzyme, a tumour suppressor, a
XX sensitising agent, an apoptotic factor, an angiogenesis inhibitor, a
XX cytokine or an immunogenic antigen, or is an antisense polynucleotide or
XX a catalytic polynucleotide. Expression vectors, e.g. retroviral, adeno-
XX associated viral and adenoviral vectors, host cells and transgenic
XX animals are provided. The SM-MHC promoter/enhancer provides for specific
XX expression in SM cells of the bladder, gastrointestinal tract or urinary
XX tract, aorta artery, carotid artery, pulmonary artery, vena cava vein or
XX vascular SM. The compositions and methods for targeted gene delivery and
XX expression are useful in treating diseases associated with abnormal
XX function of SM cells, e.g. systemic hypertension, pulmonary hypertension,
XX atherosclerosis, asthma, coronary artery disease, gastrointestinal
XX abnormalities, reproductive dysfunction or chronic bronchitis
XX Sequence 10 BP; 0 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 47;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 CCTTCTTGGG 14
Db ||||| |||||
1 CCTTTTGGG 10

RESULT 90
ACA60848
ID ACA60848 standard; DNA; 10 BP.
XX ACA60848;
XX ACA60848;
XX 03-JUL-2003 (first entry)
XX Rat smooth muscle myosin heavy chain wild-type CarG2 motif.
XX Rat; ds; smooth muscle; myosin heavy chain; SM-MHC; CarG; hypotensive;
XX antiatherosclerotic; antiasthmatic; antiinflammatory; promoter; enhancer;
XX systemic hypertension; pulmonary hypertension; atherosclerosis; asthma;
XX coronary artery disease; gastrointestinal abnormality; stem cell;
XX reproductive dysfunction; chronic bronchitis; tissue regeneration.
XX Rattus sp.
XX US2003017549-A1.
XX 23-JAN-2003.
XX 24-JAN-2002; 2002US-00057726.
XX

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XX 16-JAN-1998; 98US-0071300P.
PR 15-JAN-1999; 99WO-US001038.
PR 13-JUL-2000; 2000US-00600319.
PR 24-JAN-2001; 2001US-0263811P.
XX (OWEN/) OWENS G K.
XX Owens GK, Manabe I;
XX WPI; 2002-599772/64.
XX New smooth muscle myosin heavy chain promoter/enhancers, useful for
XX smooth muscle tissue-specific targeting and expression, or for genetic
XX engineering as a means to investigate smooth muscle cell physiology and
XX pathophysiology.
XX Example 4; Page 23; 75pp; English.
XX The invention relates to an isolated, synthetic, or recombinant
XX polynucleotide comprising a smooth muscle myosin heavy chain (SM-MHC)
XX promoter/enhancer sequence capable of conferring smooth muscle specific
XX expression in vivo. Also included are expression vectors comprising the
XX SM-MHC promoter/enhancers, a genetically engineered host cell comprising
XX the vector, a transgenic non-human animal comprising the SM-MHC promoter/
XX enhancer and screening a compound that modulates the activity of an SM-
XX MHC promoter/enhancer. The SM-MHC promoter/enhancer is useful for
XX expressing a polynucleotide (a reporter gene or polynucleotide encoding a
XX therapeutic protein) in a smooth muscle cell in vivo. The smooth muscle
XX cell is in a coronary artery, aorta, airway smooth muscle, or pulmonary
XX vascular smooth muscle, or bladder smooth muscle, gastrointestinal tract
XX smooth muscle, urinary tract smooth muscle, or gastrointestinal tract
XX smooth muscle, or small branching artery smooth muscle. The SM-MHC
XX promoter/enhancer further comprises a minimal thymidine kinase (TK)
XX promoter. The targeted delivery of the SM-MHC promoter/enhancer is useful
XX for development of animal models of human disease to assist in
XX development of new therapeutic targets or development of animals models
XX for purpose of screening new drugs/therapies. The SM-MHC promoter/
XX enhancer facilitates targeted gene delivery to express a gene of interest
XX within an SMC. Targeted gene delivery and expression of the SM-MHC
XX promoter/enhancer is useful for treating diseases associated with
XX abnormal function of SMC including systemic hypertension, pulmonary
XX hypertension, atherosclerosis, asthma, coronary artery disease,
XX gastrointestinal abnormalities, reproductive dysfunction and chronic
XX bronchitis. The SM-MHC promoter/enhancer and transformed cells are useful
XX for identifying and selecting SMC derived from multi-potent stem cell
XX populations for purposes of tissue generation/regeneration for surgery
XX (e.g. for blood vessel, bladder, or gastrointestinal smooth muscle tissue
XX augmentation-reconstitution). The SM-MHC genes contain CarG motifs in
XX their promoter and first intron regions, these motifs are thought to be
XX responsible for smooth muscle cell subtype specific expression of SM-MHC.
XX The present sequence is a rat SM-MHC wild-type CarG motif
XX Sequence 10 BP; 0 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 47;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 CCTTCTTGGG 14
Db ||||| |||||
1 CCTTTTGGG 10

RESULT 91
ABQ72900
ID ABQ72900 standard; DNA; 10 BP.
XX ABQ72900;
XX ABQ72900;
XX 06-SEP-2002 (first entry)
XX

```

DE Human GRM8 gene polymorphism detection primer, SEQ ID NO:104.  
 XX  
 KW Human; glutamate receptor metabotropic 8; GRM8; receptor;  
 KW chromosome 7q31.3-32.1; neurotransmission; glutamate-mediated;  
 KW Smith-Lemli-Opitz syndrome; retinitis pigmentosa;  
 KW neuropathological disorder; neuroprotective; ophthalmological;  
 KW gene therapy; haplotyping; genotyping; haplotype; genetic variant;  
 KW single nucleotide polymorphism; SNP; drug screening; drug discovery;  
 KW primer extension; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200238587-A2.  
 PN  
 XX 16-MAY-2002.  
 XX  
 XX 09-NOV-2001; 2001WO-US047325.  
 PF  
 XX 09-NOV-2000; 2000US-0247576P.  
 XX  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA  
 XX Bieglecki KM, Chew A, Choi JY, Koshy B, Parks KE;  
 PI  
 XX WPI; 2002-519291/55.  
 DR  
 XX Genetic variants of Glutamate Receptor, Metabotropic 8 isogenes, useful  
 PT for improving efficiency and reliability in drug development for treating  
 PT neuropathological conditions and retinitis pigmentosa.  
 XX  
 XX Claim 17; Page 15; 110pp; English.  
 PS  
 XX The invention relates to a method for haplotyping the glutamate receptor,  
 CC metabotropic 8 (GRM8) gene (ABQ72798, ABQ72905) of an individual, and  
 CC also describes 21 novel polymorphic sites within the human GRM8 gene. The  
 CC GRM8 gene is located on chromosome 7q31.3-32.1 and contains 10 exons  
 CC which encode a 908 amino acid protein (AB009564). GRM8 is involved in  
 CC glutamate-mediated neurotransmission, being a member of a subfamily of  
 CC metabotropic glutamate receptors that inhibit the activity of adenylate  
 CC cyclase in response to glutamate stimulation. The chromosomal location of  
 CC the GRM8 gene encompasses regions linked to Smith-Lemli-Opitz syndrome  
 CC and a form of retinitis pigmentosa. GRM8 nucleic acid sequences are  
 CC useful in studying the expression and function of GRM8, and in expressing  
 CC GRM8 protein for use in screening drugs for the treatment of GRM8-  
 CC associated diseases (e.g., neuropathological disorders, Smith-Lemli-Opitz  
 CC syndrome and retinitis pigmentosa). GRM8 nucleic acids and proteins are  
 CC also useful in studying the effect of polymorphisms on the biological  
 CC activity of GRM8. Polymorphisms in the target region may be determined by  
 CC the use of allele-specific oligonucleotides (ASOs; ABQ72800-ABQ72862) as  
 CC probes and primers, and by primer extension using oligonucleotide primers  
 CC comprising sequences ABQ72863-ABQ72904. The method of the invention is  
 CC useful for haplotyping the GRM8 gene in populations and in individuals,  
 CC enabling decisions to be made as to whether GRM8 is a likely therapeutic  
 CC target for a disease of interest, and in the design of clinical trials of  
 CC candidate drugs for treating GRM8-associated disorders. In addition,  
 CC transgenic animals comprising a human GRM8 gene are useful for studying  
 CC the expression of GRM8 isogenes in vivo, for in vivo screening and  
 CC testing of drugs targeted to GRM8, and for testing the efficacy of  
 CC therapeutic agents and compounds for treating GRM8-associated conditions  
 CC in a biological system. Sequences ABQ72863-ABQ72904 represent sequences  
 CC that are specifically claimed as components of primers used to detect  
 CC polymorphisms in the GRM8 gene by primer extension  
 XX  
 SQ Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;  
 Best Local Similarity 90.0%; Pred. No. 47;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 11 TGGGAGAG 20  
 Db 1 TGGTCAGAG 10

RESULT 92  
 ABR96537  
 ID ABR96537 standard; DNA; 10 BP.  
 XX  
 AC ABR96537;  
 XX  
 DT 24-SEP-2002 (first entry)  
 XX  
 DE Human PLAU gene, primer extension primer 3' terminus #10.  
 XX  
 XX Human; ss; primer; plasminogen activator; urokinase; PLAU; cancer;  
 KW cytosolic; serine protease; thrombolytic disorder; isogene; PCR;  
 KW pulmonary embolism; chromosome 10q24-qter; haplotype; genotype; SNP;  
 KW single nucleotide polymorphism; thrombolytic; gene therapy;  
 KW primer extension.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200240503-A2.  
 PN  
 XX 23-MAY-2002.  
 PD  
 XX 14-NOV-2001; 2001WO-US044001.  
 PF  
 XX 17-NOV-2000; 2000US-0249703P.  
 PR  
 XX (GENA-) GENAISSANCE PHARM INC.  
 PA  
 XX Anastasio AE, Bentivegna SC, Koshy B;  
 PI  
 XX WPI; 2002-519370/55.  
 DR  
 XX Genetic variants of Plasminogen activator, Urokinase (PLAU) isogenes,  
 PT useful for improving efficiency and reliability in drug development for  
 PT treating thrombolytic disorders and cancer.  
 XX  
 PS Claim 16; Page 14; 92pp; English.  
 XX  
 CC The invention relates to a polynucleotide comprising a first nucleotide  
 CC sequence (NSI) comprising a PLAU (plasminogen activator, urokinase, a  
 CC serine protease) isogene selected from isogenes 1-9 and 11-20 given in  
 CC the specification, where each isogene comprises the regions of the PLAU  
 CC gene or cDNA and is further defined by the corresponding sequence of  
 CC polymorphisms (defining single nucleotide polymorphisms, SNP). Also  
 CC included are methods of haplotyping/genotyping (and predicting the  
 CC haplotype/genotype of the PLAU gene of an individual, identifying an  
 CC association between a trait and at least one haplotype or haplotype pair  
 CC of the PLAU gene, an isolated oligonucleotide for detecting a  
 CC polymorphism in the PLAU gene, a recombinant non-human organism  
 CC transformed or transfected with the gene or cDNA, fragments of the  
 CC polynucleotides of at least 10 base pairs encompassing a polymorphic  
 CC site, an isolated polymorphic variant PLAU protein or fragment, an  
 CC isolated monoclonal antibody specific for PLAU, a computer system for  
 CC storing and analysing polymorphism data for the PLAU gene and a genome  
 CC anthology for the PLAU gene. PLAU is useful in screening for drugs  
 CC targeting PLAU that are useful for treating thrombolytic disorders and  
 CC cancers. The methods are useful for improving the efficiency and  
 CC reliability of the discovery and development of drugs for treating  
 CC diseases associated with PLAU activity, in validating PLAU as a drug  
 CC target and in the design of clinical trials for treating a specific  
 CC condition of disease associated with PLAU activity. The antibody is  
 CC useful in diagnostic, prognostic and therapeutic methods. PLAU  
 CC polynucleotides are useful in studying the expression and function of  
 CC PLAU, and in expressing PLAU protein for use in screening for candidate  
 CC drugs to treat diseases related to PLAU activity. The gene for PLAU is  
 CC located on chromosome 10q24-qter. The present sequence is the 3' terminus  
 CC of an allele specific primer used to amplify PLAU polynucleotides with a  
 CC specific polymorphism using the technique of primer extension  
 XX  
 SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 10;





RESULT 95		Query Match	42.0%;	Score 8.4;	DB 1;	Length 11;
AA52514/c		Best Local Similarity	90.0%;	Pred. No. 52;		
ID	AAA52514 standard; DNA; 11 BP.	Matches	9;	Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
XX	AA52514;					
XX	25-SEP-2000 (first entry)					
DT	Human MN gene intron 7 splice donor sequence.					
DE						
XX	MN protein; tumour associated cell adhesion molecule; oncoprotein;					
KW	proteoglycan domain; PG domain; carbonic anhydrase; CA domain;					
KW	abnormal expression; neoplastic disease; cancer; gene therapy; ds.					
XX						
OS	Homo sapiens.					
XX						
PN	WO200024913-A2.					
PD	04-MAY-2000.					
XX						
XX	22-OCT-1999; 99WO-US024879.					
PF						
XX	23-OCT-1998; 98US-00177776.					
PR						
XX	23-OCT-1998; 98US-00178115.					
XX						
PA	(FARB ) BAYER CORP.					
PA	(VIRO-) INST VIROLOGY.					
XX						
PI	Zavada J, Pastorekova S, Pastorek J;					
XX	WPI; 2000-350752/30.					
XX						
PT	A molecule which specifically binds to a site on MN protein (oncoprotein)					
PT	and prevents adhesion of vertebrate cells to the protein, useful for					
PT	treating preneoplastic or neoplastic diseases such as cancer.					
XX						
PS	Disclosure; Page 26; 154pp; English.					
XX						
CC	The invention relates to the inhibition of cell adhesion mediated by the					
CC	MN oncoprotein (also known as the MN/CA IX isoenzyme or the MN/G250					
CC	protein). The MN protein is a tumour-associated adhesion molecule which					
CC	comprises a proteoglycan-like (PG) domain (AAB03017) which contains the					
CC	protein's binding site, and a carbonic anhydrase (CA) domain (AAB03018).					
CC	Abnormal expression of the MN protein is associated with tumorigenicity.					
CC	The invention encompasses molecules (e.g., proteins and peptides) which					
CC	which specifically bind to a site on the MN protein, thereby preventing					
CC	adhesion of vertebrate cells to the protein in a cell adhesion assay. It					
CC	also encompasses MN proteins or MN protein fragments which can be added					
CC	to the extracellular environment to prevent the adhesion of vertebrate					
CC	cells to each other. The invention also relates to the identification of					
CC	the binding site of the MN protein and to a method of identifying a site					
CC	on an MN protein to which cells adhere, comprising testing a series of					
CC	overlapping peptides from the protein in a cell adhesion assay. The					
CC	invention encompasses a vector comprising an expression control sequence					
CC	operatively linked to a nucleic acid encoding the variable domains of a					
CC	MN-specific antibody, where the domains are separated by a flexible					
CC	linker peptide (AAB03035) and the vector inhibits the growth of a					
CC	vertebrate preneoplastic or neoplastic cell that abnormally expresses MN					
CC	protein. The invention also encompasses a vector comprising a nucleic					
CC	acid encoding a cytotoxic protein or peptide operatively linked to the MN					
CC	gene promoter, which inhibits the growth of a vertebrate preneoplastic or					
CC	neoplastic cell. Also claimed is a repressor complex that binds to the MN					
CC	gene promoter (AAA52473). MN proteins and peptides, MN-binding proteins					
CC	and peptides, and expression vectors encoding such proteins and peptides					
CC	are useful for treating patients with preneoplastic or neoplastic disease					
CC	(e.g., cancers) associated with or characterised by abnormal MN					
CC	expression. The present sequence represents a fragment of the human MN					
CC	gene (AAA52462) specified in the invention					
XX						
SQ	Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;					

---

RESULT 96		Query Match	42.0%;	Score 8.4;	DB 1;	Length 11;
ABQ87504		Best Local Similarity	90.0%;	Pred. No. 52;		
ID	ABQ87504 standard; cDNA; 11 BP.	Matches	9;	Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
XX	ABQ87504;					
XX	10-SEP-2002 (first entry)					
DT	Human skin stress/ageing related EST SEQ ID NO 1259.					
DE						
XX	Human; skin ageing; skin stress; EST; expressed sequence tag; ss.					
KW						
XX						
OS	Homo sapiens.					
XX						
PN	WO200253773-A2.					
XX						
PD	11-JUL-2002.					
XX						
PF	20-DEC-2001; 2001WO-EP015178.					
XX						
PR	03-JAN-2001; 2001DE-01000121.					
XX						
PA	(HENK ) HENKEL KGAA.					
XX						
PI	Petersohn D, Conradt M, Hofmann K;					
XX	WPI; 2002-528865/56.					
XX						
PT	Identifying genes involved in skin stress and aging, useful e.g. in					
PT	screening for cosmetic or therapeutic agents, based on differential gene					
PT	expression.					
XX						
PS	Claim 8; Page 89; 325pp; German.					
XX						
CC	The invention relates to identifying (M1) genes in vitro that, in humans					
CC	or animals, are important for skin ageing and/or skin stress by serial					
CC	analysis of gene expression between mixtures of transcribed and					
CC	optionally translated, genetically encoded factors (A) obtained from					
CC	young and aged skin, to identify that genes that show strong differential					
CC	expression. (A) comprises protein or mRNAs or their fragments. (M1) is					
CC	useful for: identifying markers of skin ageing and/or stress; determining					
CC	skin ageing and/or stress; and identifying or determining the effects of					
CC	pharmaceutical or cosmetic agents for control of skin ageing. The present					
CC	sequence is one of a group of human skin ageing/stress related expressed					
CC	sequence tags (ABQ86246-ABQ87680) of the invention					
XX						
SQ	Sequence 11 BP; 2 A; 3 C; 2 G; 4 T; 0 U; 0 Other;					

---

RESULT 97		Query Match	42.0%;	Score 8.4;	DB 1;	Length 11;
ABQ87500		Best Local Similarity	90.0%;	Pred. No. 52;		
ID	ABQ87500 standard; cDNA; 11 BP.	Matches	9;	Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
XX	ABQ87500;					
XX	10-SEP-2002 (first entry)					
DT						

---

RESULT 98		Query Match	42.0%;	Score 8.4;	DB 1;	Length 11;
ABQ87500		Best Local Similarity	90.0%;	Pred. No. 52;		
ID	ABQ87500 standard; cDNA; 11 BP.	Matches	9;	Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
XX	ABQ87500;					
XX	10-SEP-2002 (first entry)					
DT						

```

XX DE Human skin stress/ageing related EST SEQ ID NO 1255.
XX KW Human; skin ageing; skin stress; EST; expressed sequence tag; ss.
XX OS Homo sapiens.
XX PN WO200253773-A2.
XX PD 11-JUL-2002.
XX PF 20-DEC-2001; 2001WO-EP015178.
XX PR 03-JAN-2001; 2001DE-01000121.
XX PA (HENK ) HENKEL KGAA.
XX PI Petersohn D, Conradt M, Hofmann K;
XX WI; 2002-528865/56.
XX PT Identifying genes involved in skin stress and aging, useful e.g. in
PT screening for cosmetic or therapeutic agents, based on differential gene
PT expression.
XX PS Claim 8; Page 89; 325pp; German.
XX CC The invention relates to identifying (M1) genes in vitro that, in humans
CC or animals, are important for skin ageing and/or skin stress by serial
CC analysis of gene expression between mixtures of transcribed and
CC optionally translated, genetically encoded factors (A) obtained from
CC young and aged skin, to identify that genes that show strong differential
CC expression. (A) comprises protein or mRNAs or their fragments. (M1) is
CC useful for: identifying markers of skin ageing and/or stress; determining
CC skin ageing and/or stress; and identifying or determining the effects of
CC pharmaceutical or cosmetic agents for control of skin ageing. The present
CC sequence is one of a group of human skin ageing/stress related expressed
CC sequence tags (ABQ86246-ABQ87680) of the invention
XX SQ Sequence 11 BP; 1 A; 4 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 CACCTTCTTG 12
Db 2 CACCTTCTGG 11

RESULT 98
ABQ86415/c
ID ABQ86415 standard; cDNA; 11 BP.
XX AC ABQ86415;
XX 10-SEP-2002 (first entry)
XX DE Human skin stress/ageing related EST SEQ ID NO 170.
XX KW Human; skin ageing; skin stress; EST; expressed sequence tag; ss.
XX OS Homo sapiens.
XX PN WO200253773-A2.
XX PD 11-JUL-2002.
XX PF 20-DEC-2001; 2001WO-EP015178.
XX PR 03-JAN-2001; 2001DE-01000121.
XX PA (HENK ) HENKEL KGAA.

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XX PI Petersohn D, Conradt M, Hofmann K;
XX WI; 2002-528865/56.
XX PT Identifying genes involved in skin stress and aging, useful e.g. in
PT screening for cosmetic or therapeutic agents, based on differential gene
PT expression.
XX PS Claim 8; Page 44; 325pp; German.
XX CC The invention relates to identifying (M1) genes in vitro that, in humans
CC or animals, are important for skin ageing and/or skin stress by serial
CC analysis of gene expression between mixtures of transcribed and
CC optionally translated, genetically encoded factors (A) obtained from
CC young and aged skin, to identify that genes that show strong differential
CC expression. (A) comprises protein or mRNAs or their fragments. (M1) is
CC useful for: identifying markers of skin ageing and/or stress; determining
CC skin ageing and/or stress; and identifying or determining the effects of
CC pharmaceutical or cosmetic agents for control of skin ageing. The present
CC sequence is one of a group of human skin ageing/stress related expressed
CC sequence tags (ABQ86246-ABQ87680) of the invention
XX SQ Sequence 11 BP; 6 A; 0 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 CCACCTTCTT 11
Db 11 CCACCTTCTT 2

RESULT 99
ABV66344/c
ID ABV66344 standard; cDNA; 11 BP.
XX AC ABV66344;
XX 21-OCT-2002 (first entry)
XX DE Human skin EST 4130.
XX KW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;
XX immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
XX psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX OS Homo sapiens.
XX PN WO200253774-A2.
XX PD 11-JUL-2002.
XX PF 20-DEC-2001; 2001WO-EP015179.
XX PR 03-JAN-2001; 2001DE-01000127.
XX PA (HENK ) HENKEL KGAA.
XX PI Petersohn D, Conradt M, Hofmann K;
XX WI; 2002-590638/63.
XX PT In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX PS Disclosure; Page 139; 1345pp; German.
XX CC The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)

```

CC so as to identify skin-expressed genes and quantify their expression.  
CC (M1) is useful for identifying genes involved in skin homeostasis; to  
CC determine skin homeostasis and to test agent (A) that maintains or  
CC promotes skin homeostasis or that can be used for treating skin  
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
CC skin. The present sequence is that of a human expressed sequence tag  
CC (EST) of the invention  
XX  
SQ Sequence 11 BP; 5 A; 3 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 52;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 TTCTTGGGCA 16  
DB 11 TTTTGGGCA 2  
||| |||||

RESULT 100  
ABV62764/c  
ID ABV62764 standard; cDNA; 11 BP.  
XX AC ABV62764;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Human skin EST 550.

XX Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhaeic;  
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200253774-A2.  
XX  
PD 11-JUL-2002.  
XX  
PF 20-DEC-2001; 2001WO-EP015179.  
XX  
PR 03-JAN-2001; 2001DE-01000127.  
XX  
PA (HENK ) HENKEL KGAA.  
XX  
PI Petersohn D, Conradt M, Hofmann K;  
XX  
DR WPI; 2002-590638/63.  
XX  
PT 11-JUL-2002.  
XX  
PF 20-DEC-2001; 2001WO-EP015179.  
XX  
PR 03-JAN-2001; 2001DE-01000127.  
XX  
PA (HENK ) HENKEL KGAA.  
XX  
PI Petersohn D, Conradt M, Hofmann K;  
XX  
DR WPI; 2002-590638/63.  
XX  
PT In vitro identification of skin-expressed genes, useful for determining  
PT homeostasis and identifying cosmetic or pharmaceutical agents against  
PT e.g. skin cancer.  
XX  
PS Disclosure; Page 40; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed  
CC in the skin of humans or animals by subjecting a mixture of genetically  
CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
CC so as to identify skin-expressed genes and quantify their expression.  
CC (M1) is useful for identifying genes involved in skin homeostasis; to  
CC determine skin homeostasis and to test agent (A) that maintains or  
CC promotes skin homeostasis or that can be used for treating skin  
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
CC skin. The present sequence is that of a human expressed sequence tag  
CC (EST) of the invention  
XX  
SQ Sequence 11 BP; 4 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 52;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCCTT 11  
DB 10 CCACCTTCCTT 1  
||| |||||

RESULT 102  
ABV62651/c  
ID ABV62651 standard; cDNA; 11 BP.  
XX AC ABV62651;

Best Local Similarity 90.0%; Pred. No. 52;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCCTT 11  
DB 10 CCACCTTCCTT 1  
||| |||||

RESULT 101  
ABV70185/c  
ID ABV70185 standard; cDNA; 11 BP.  
XX AC ABV70185;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Human skin EST 7971.  
XX  
KW Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhaeic;  
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200253774-A2.  
XX  
PD 11-JUL-2002.  
XX  
PF 20-DEC-2001; 2001WO-EP015179.  
XX  
PR 03-JAN-2001; 2001DE-01000127.  
XX  
PA (HENK ) HENKEL KGAA.  
XX  
PI Petersohn D, Conradt M, Hofmann K;  
XX  
DR WPI; 2002-590638/63.  
XX  
PT In vitro identification of skin-expressed genes, useful for determining  
PT homeostasis and identifying cosmetic or pharmaceutical agents against  
PT e.g. skin cancer.  
XX  
PS Claim 24; Page 254; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed  
CC in the skin of humans or animals by subjecting a mixture of genetically  
CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
CC so as to identify skin-expressed genes and quantify their expression.  
CC (M1) is useful for identifying genes involved in skin homeostasis; to  
CC determine skin homeostasis and to test agent (A) that maintains or  
CC promotes skin homeostasis or that can be used for treating skin  
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
CC skin. The present sequence is that of a human expressed sequence tag  
CC (EST) of the invention  
XX  
SQ Sequence 11 BP; 4 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
Best Local Similarity 90.0%; Pred. No. 52;  
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCCTT 11  
DB 10 CCACCTTCCTT 1  
||| |||||

RESULT 102  
ABV62651/c  
ID ABV62651 standard; cDNA; 11 BP.  
XX AC ABV62651;

```

XX 21-OCT-2002 (first entry)
XX Human skin EST 437.
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX Homo sapiens.
XX
XX WO200253774-A2.
XX
XX 11-JUL-2002.
XX
XX 20-DEC-2001; 2001WO-EP015179.
XX
XX 03-JAN-2001; 2001DE-01000127.
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
XX
XX WPI; 2002-590638/63.
XX
XX In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
XX Disclosure; Page 37; 1345pp; German.
XX
XX The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
XX Sequence 11 BP; 0 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 2 CCCGCTTCT 11
|||||
|||||

RESULT 103
ABV67006/c
ID ABV67006 standard; cDNA; 11 BP.
XX
XX ABV67006;
XX
XX 21-OCT-2002 (first entry)
XX Human skin EST 4792.
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX Homo sapiens.
XX
XX WO200253774-A2.
XX

PD 11-JUL-2002.
XX
XX 20-DEC-2001; 2001WO-EP015179.
XX
XX 03-JAN-2001; 2001DE-01000127.
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
XX
XX WPI; 2002-590638/63.
XX
XX In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
XX Disclosure; Page 157; 1345pp; German.
XX
XX The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
XX Sequence 11 BP; 6 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
SQ
Query Match 42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CCACCTTCTT 11
Db 11 CCACCTTCTT 2
|||||
|||||

RESULT 104
ABV67047
ID ABV67047 standard; cDNA; 11 BP.
XX
XX ABV67047;
XX
XX 21-OCT-2002 (first entry)
XX Human skin EST 4833.
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX Homo sapiens.
XX
XX WO200253774-A2.
XX
XX 11-JUL-2002.
XX
XX 20-DEC-2001; 2001WO-EP015179.
XX
XX 03-JAN-2001; 2001DE-01000127.
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
XX
XX WPI; 2002-590638/63.
XX
XX In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
XX Disclosure; Page 37; 1345pp; German.
XX
XX The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
XX Sequence 11 BP; 0 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCACTTCT 10
Db 2 CCCGCTTCT 11
|||||
|||||

RESULT 103
ABV67006/c
ID ABV67006 standard; cDNA; 11 BP.
XX
XX ABV67006;
XX
XX 21-OCT-2002 (first entry)
XX Human skin EST 4792.
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX Homo sapiens.
XX
XX WO200253774-A2.
XX

```

PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 XX e.g. skin cancer.  
 PS Disclosure; Page 158; 1345pp; German.  
 XX  
 CC The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 SQ Sequence 11 BP; 1 A; 4 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 Best Local Similarity 90.0%; Pred. No. 52;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3 CACCTTCTTG 12  
 Db 2 CACCTTCTGG 11  
 |||||  
 RESULT 105  
 ABV64836/c  
 ID ABV64836 standard; cDNA; 11 BP.  
 AC ABV64836;  
 XX  
 XX 21-OCT-2002 (first entry)  
 DT Human skin EST 2622.  
 DE  
 XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200253774-A2.  
 PN  
 XX 11-JUL-2002.  
 PD  
 XX 20-DEC-2001; 2001WO-EP015179.  
 PF  
 XX 03-JAN-2001; 2001DE-01000127.  
 PR (HENK ) HENKEL KGAA.  
 XX Petersohn D, Conradt M, Hofmann K;  
 PI WPI; 2002-590638/63.  
 XX  
 XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX Disclosure; Page 98; 1345pp; German.  
 XX  
 CC The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC

CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 SQ Sequence 11 BP; 6 A; 0 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 Best Local Similarity 90.0%; Pred. No. 52;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 CCACCTTCTT 11  
 Db 10 CCACCTTTTT 1  
 |||||  
 RESULT 106  
 ABV67092  
 ID ABV67092 standard; cDNA; 11 BP.  
 AC ABV67092;  
 XX  
 XX 21-OCT-2002 (first entry)  
 DT Human skin EST 4878.  
 DE  
 XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200253774-A2.  
 PN  
 XX 11-JUL-2002.  
 PD  
 XX 20-DEC-2001; 2001WO-EP015179.  
 PF  
 XX 03-JAN-2001; 2001DE-01000127.  
 PR (HENK ) HENKEL KGAA.  
 XX Petersohn D, Conradt M, Hofmann K;  
 PI WPI; 2002-590638/63.  
 XX  
 XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX Disclosure; Page 159; 1345pp; German.  
 XX  
 CC The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 SQ Sequence 11 BP; 1 A; 5 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 Best Local Similarity 90.0%; Pred. No. 52;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 CCACCTTCTT 11  
 |||||

KW	Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic; immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis; psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
OS	Homo sapiens.
XX	WO200253774-A2.
XX	11-JUL-2002.
XX	20-DEC-2001; 2001WO-EP015179.
PF	03-JAN-2001; 2001DE-01000127.
XX	(HENK ) HENKEL KGAA.
XX	Petersohn D, Conradt M, Hofmann K;
PI	WPI; 2002-590638/63.
DR	In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against e.g. skin cancer.
XX	Claim 24; Page 323; 1345pp; German.
XX	The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression. (M1) is useful for identifying genes involved in skin homeostasis; to determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma; ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; rosacea; melanoma; basal cell carcinoma; and carcinoma of sarcoma of the skin. The present sequence is that of a human expressed sequence tag (EST) of the invention
XX	Sequence 11 BP; 2 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
SQ	Query Match 42.0%; Score 8.4; DB 1; Length 11; Best Local Similarity 90.0%; Pred. No. 52; Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0
Qy	9 CTTGGGCAGCA 18 
Db	2 CTTGGGCACA 11 
RESULT 109	
ABV62632/c	
ID	ABV62632 standard; cDNA; 11 BP.
XX	ABV62632;
AC	21-OCT-2002 (first entry)
XX	Human skin EST 418.
DE	
XX	Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic; immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis; psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
OS	Homo sapiens.
XX	WO200253774-A2.
XX	11-JUL-2002.
XX	20-DEC-2001; 2001WO-EP015179.
PF	03-JAN-2001; 2001DE-01000127.
XX	

XX (HUNK ) HENKEL KGAA.  
 XX  
 XX Petersohn D, Conradt M, Hofmann K;  
 XX  
 XX WPI; 2002-590638/63.  
 XX  
 XX  
 XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX  
 XX Disclosure; Page 37; 1345pp; German.  
 XX  
 XX The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 XX Sequence 11 BP; 5 A; 1 C; 4 G; 1 T; 0 U; 0 Other;  
 XX  
 XX Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 XX Best Local Similarity 90.0%; Pred. No. 52;  
 XX Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 XX  
 XX QY 3 CACCTCTCTG 12  
 XX |||||  
 XX Db 11 CACTTCTCTG 2  
 XX  
 XX RESULT 110  
 XX ABV65381/C  
 XX ID ABV65381 standard; cDNA; 11 BP.  
 XX AC ABV65381;  
 XX  
 XX 21-OCT-2002 (first entry)  
 XX  
 XX Human skin EST 3167.  
 XX  
 XX Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO200253774-A2.  
 XX  
 XX 11-JUL-2002.  
 XX  
 XX 20-DEC-2001; 2001WO-EP015179.  
 XX  
 XX 03-JAN-2001; 2001DE-01000127.  
 XX  
 XX (HUNK ) HENKEL KGAA.  
 XX  
 XX Petersohn D, Conradt M, Hofmann K;  
 XX  
 XX WPI; 2002-590638/63.  
 XX  
 XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX  
 XX Disclosure; Page 113; 1345pp; German.  
 XX

XX The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX  
 XX Sequence 11 BP; 3 A; 0 C; 7 G; 1 T; 0 U; 0 Other;  
 XX  
 XX Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 XX Best Local Similarity 90.0%; Pred. No. 52;  
 XX Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 XX  
 XX QY 1 CCCACCTCTCT 10  
 XX |||||  
 XX Db 10 CCCACCTCTCT 1  
 XX  
 XX RESULT 111  
 XX ABV67446  
 XX ID ABV67446 standard; cDNA; 11 BP.  
 XX AC ABV67446;  
 XX  
 XX 21-OCT-2002 (first entry)  
 XX  
 XX Human skin EST 5232.  
 XX  
 XX Human; skin; dermatological; vulnary; antipsoriatic; antiseborrhoeic;  
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;  
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO200253774-A2.  
 XX  
 XX 11-JUL-2002.  
 XX  
 XX 20-DEC-2001; 2001WO-EP015179.  
 XX  
 XX 03-JAN-2001; 2001DE-01000127.  
 XX  
 XX (HUNK ) HENKEL KGAA.  
 XX  
 XX Petersohn D, Conradt M, Hofmann K;  
 XX  
 XX WPI; 2002-590638/63.  
 XX  
 XX In vitro identification of skin-expressed genes, useful for determining  
 PT homeostasis and identifying cosmetic or pharmaceutical agents against  
 PT e.g. skin cancer.  
 XX  
 XX Disclosure; Page 169; 1345pp; German.  
 XX  
 XX The invention relates to in vitro identification (M1) of genes expressed  
 CC in the skin of humans or animals by subjecting a mixture of genetically  
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)  
 CC so as to identify skin-expressed genes and quantify their expression.  
 CC (M1) is useful for identifying genes involved in skin homeostasis; to  
 CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX



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Query Match      42.0%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      10 TTGGGCAGAA 19
          |||||
Db       1 TTGGGCAGGA 10

RESULT 113
ABV65314

```



CC determine skin homeostasis and to test agent (A) that maintains or  
 CC promotes skin homeostasis or that can be used for treating skin  
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;  
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;  
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the  
 CC skin. The present sequence is that of a human expressed sequence tag  
 CC (EST) of the invention  
 XX

SQ Sequence 11 BP; 5 A; 1 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 42.0%; Score 8.4; DB 1; Length 11;  
 Best Local Similarity 90.0%; Pred. No. 52;  
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CACCTTCTTG 12  
 ||| |||||  
 DB 11 CACTTCTTG 2

RESULT 117  
 AAT09397/c  
 ID AAT09397 standard; DNA; 8 BP.

XX AAT09397;

DT 25-MAR-2003 (revised)  
 DT 21-JUN-1996 (first entry)

DE 5'-primer used for characterisation of human biological samples.

XX 5'-primer; human; protein coding region; PCR primer kit;  
 KW characterisation; biological samples; PCR amplification; indexing;  
 KW identification; cloning; analysis; genes; genome mapping;  
 KW disease diagnosis; ss.

XX Synthetic.

XX WO9531574-A1.

XX 23-NOV-1995.

PF 12-MAY-1995; 95WO-US006032.

PR 16-MAY-1994; 94US-00242887.

XX (BGHM ) BRIGHAM & WOMENS HOSPITAL.

XX Lopeznielo CE, Nigam SK;

XX WPI; 1996-010958/01.

XX Characterisation of nucleotide sequences using primer pairs - by PCR  
 PT amplification and indexing of amplification prods. w.r.t. primers used  
 PT for genome mapping and disease diagnosis.

XX Claim 5; Page 44; 72pp; English.

XX The 5'-primers AAT09358-508, and the 3'-primers AAT09509-659, which  
 CC target human protein coding regions, together comprise a PCR primer kit  
 CC with 1361 possible primer pairs. The kit is used in a new method for the  
 CC characterisation of nucleic acid sequences obtd. from human biological  
 CC samples, which comprises PCR amplification and indexing of the prods.  
 CC w.r.t the primer pair that hybridised to its delineating subsequences.  
 CC The method may be used in the identification, cloning and analysis of  
 CC genes, e.g. in genome mapping, and disease diagnosis. (Updated on 25-MAR-  
 CC 2003 to correct PI field.)

SQ Sequence 8 BP; 4 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCTTG 12  
 ||| |||||  
 DB 8 CCTTCTTG 1

RESULT 118  
 AAT09546

ID AAT09546 standard; DNA; 8 BP.

XX AAT09546;

XX 25-MAR-2003 (revised)

DT 25-JUN-1996 (first entry)

DE 3'-primer used for characterisation of human biological samples.

XX 3'-primer; human; protein coding region; PCR primer kit;  
 KW characterisation; biological samples; PCR amplification; indexing;  
 KW identification; cloning; analysis; genes; genome mapping;  
 KW disease diagnosis; ss.

XX Synthetic.

XX WO9531574-A1.

XX 23-NOV-1995.

PF 12-MAY-1995; 95WO-US006032.

PR 16-MAY-1994; 94US-00242887.

XX (BGHM ) BRIGHAM & WOMENS HOSPITAL.

XX Lopeznielo CE, Nigam SK;

XX WPI; 1996-010958/01.

XX Characterisation of nucleotide sequences using primer pairs - by PCR  
 PT amplification and indexing of amplification prods. w.r.t. primers used  
 PT for genome mapping and disease diagnosis.

XX Disclosure; Page 19; 72pp; English.

XX The 5'-primers AAT09358-508, and the 3'-primers AAT09509-659, which  
 CC target human protein coding regions, together comprise a PCR primer kit  
 CC with 1361 possible primer pairs. The kit is used in a new method for the  
 CC characterisation of nucleic acid sequences obtd. from human biological  
 CC samples, which comprises PCR amplification and indexing of the prods.  
 CC w.r.t the primer pair that hybridised to its delineating subsequences.  
 CC The method may be used in the identification, cloning and analysis of  
 CC genes, e.g. in genome mapping, and disease diagnosis. (Updated on 25-MAR-  
 CC 2003 to correct PI field.)

SQ Sequence 8 BP; 0 A; 3 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 8;  
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTTCTTG 12  
 ||| |||||  
 DB 1 CCTTCTTG 8

RESULT 119  
 AAT09415/c

ID AAT09415 standard; DNA; 8 BP.

XX AAT09415;

XX 25-MAR-2003 (revised)

DT 21-JUN-1996 (first entry)

XX

DE 5'-primer used for characterisation of human biological samples.  
XX  
KW 5'-primer; human; protein coding region; PCR primer kit;  
KW characterisation; biological samples; PCR amplification; indexing;  
KW identification; cloning; analysis; genes; genome mapping;  
KW disease diagnosis; ss.  
XX  
OS Synthetic.  
XX  
PN WO9531574-A1.  
XX  
XX 23-NOV-1995.  
XX  
PF 12-MAY-1995; 95WO-US006032.  
XX  
XX 16-MAY-1994; 94US-00242887.  
XX  
XX (BGHM ) BRIGHAM & WOMENS HOSPITAL.  
XX  
PI Lopeznieto CE, Nigam SK;  
XX  
XX WPI; 1996-010958/01.  
XX  
XX Characterisation of nucleotide sequences using primer pairs - by PCR  
PT amplification and indexing of amplification prods. w.r.t. primers used  
PT for genome mapping and disease diagnosis.  
XX  
XX Claim 5; Page 44; 72pp; English.  
XX  
XX The 5'-primers AAT09358-508, and the 3'-primers AAT09509-659, which  
CC target human protein coding regions, together comprise a PCR primer kit  
CC with 1361 possible primer pairs. The kit is used in a new method for the  
CC characterisation of nucleic acid sequences obtd. from human biological  
CC samples, which comprises PCR amplification and indexing of the prods.  
CC w.r.t the primer pair that hybridised to its delineating subsequences.  
CC The method may be used in the identification, cloning and analysis of  
CC genes, e.g. in genome mapping, and disease diagnosis. (Updated on 25-MAR-  
XX 2003 to correct PI field.)  
XX  
SQ Sequence 8 BP; 4 A; 2 C; 2 G; 0 T; 0 U; 0 Other;  
  
Query Match 40.0%; Score 8; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.2e+02;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 6 CTTCTTGG 13  
Db |||||  
8 CTTCTTGG 1  
  
RESULT 120  
AAT09568  
ID AAT09568 standard; DNA; 8 BP.  
XX  
AC AAT09568;  
XX  
XX 25-MAR-2003 (revised)  
DT 25-JUN-1996 (first entry)  
XX  
XX 3'-primer used for characterisation of human biological samples.  
XX  
XX 3'-primer; human; protein coding region; PCR primer kit;  
KW characterisation; biological samples; PCR amplification; indexing;  
KW identification; cloning; analysis; genes; genome mapping;  
KW disease diagnosis; ss.  
XX  
OS Synthetic.  
XX  
XX WO9531574-A1.  
PN  
XX 23-NOV-1995.  
PD  
XX 12-MAY-1995; 95WO-US006032.  
PF

XX 16-MAY-1994; 94US-00242887.  
PR (BGHM ) BRIGHAM & WOMENS HOSPITAL.  
XX  
XX Lopeznieto CE, Nigam SK;  
PI  
XX WPI; 1996-010958/01.  
DR  
XX Characterisation of nucleotide sequences using primer pairs - by PCR  
PT amplification and indexing of amplification prods. w.r.t. primers used  
PT for genome mapping and disease diagnosis.  
XX  
XX Disclosure; Page 19; 72pp; English.  
XX  
XX The 5'-primers AAT09358-508, and the 3'-primers AAT09509-659, which  
CC target human protein coding regions, together comprise a PCR primer kit  
CC with 1361 possible primer pairs. The kit is used in a new method for the  
CC characterisation of nucleic acid sequences obtd. from human biological  
CC samples, which comprises PCR amplification and indexing of the prods.  
CC w.r.t the primer pair that hybridised to its delineating subsequences.  
CC The method may be used in the identification, cloning and analysis of  
CC genes, e.g. in genome mapping, and disease diagnosis. (Updated on 25-MAR-  
XX 2003 to correct PI field.)  
XX  
SQ Sequence 8 BP; 0 A; 2 C; 2 G; 4 T; 0 U; 0 Other;  
  
Query Match 40.0%; Score 8; DB 1; Length 8;  
Best Local Similarity 100.0%; Pred. No. 4.2e+02;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 6 CTTCTTGG 13  
Db |||||  
1 CTTCTTGG 8  
  
RESULT 121  
ABQ71965/C  
ID ABQ71965 standard; DNA; 9 BP.  
XX  
XX ABQ71965;  
XX  
XX 28-AUG-2002 (first entry)  
DT  
DE Zinc finger protein related oligonucleotide target SEQ ID NO:2363.  
XX  
XX Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.  
KW  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200242459-A2.  
PN  
XX 30-MAY-2002.  
PD  
XX 20-NOV-2001; 2001WO-US043438.  
PF  
XX 20-NOV-2000; 2000US-00716637.  
PR  
XX (SANG-) SANGMO BIOSCIENCES INC.  
PA  
XX Liu Q;  
PI  
XX WPI; 2002-500284/53.  
DR  
XX New zinc finger protein that binds to target site, useful in studying  
PT gene function and for human therapeutics and plant engineering, comprises  
PT first, second and third zinc fingers, ordered from N- to C-terminus.  
XX  
XX Example 1; Page 59; 81pp; English.  
PS  
XX The present invention describes a zinc finger protein (I) that binds to a  
CC target site, comprising a first (F1), a second (F2), and a third (F3)

CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the  
 CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),  
 CC and a third (S3) target subunit. Also described are: (1) a polypeptide  
 CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and  
 CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it  
 CC binds to the S1 target subunit, selecting the F2 zinc finger such that it  
 CC binds to the S2 target subunit, and selecting the F3 zinc finger such  
 CC that it binds to the S3 target subunit, thus designing (I) that binds to  
 CC a target site. (I) is useful for recognition of triplet target subunits  
 CC having the nucleotide G in the 5'-most position of the subunit. (I) is  
 CC useful in studying gene function, and for human therapeutics and plant  
 CC engineering. (I), (II) or (III) is useful in therapeutic methods to  
 CC modulate the expression of a target region within a subject, in  
 CC diagnostic methods for sequence specific detection of target nucleic acid  
 CC in a sample, and in assays to determine the phenotype and function of  
 CC target sequences. (I) has improved affinity and specificity for their  
 CC target sequences, as well as enhanced biological activity. ABQ71213 to  
 CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc  
 CC finger peptides which are given in the exemplification of the present  
 CC invention  
 XX  
 SQ Sequence 9 BP; 3 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10  
 |||||  
 Db 9 CACCTTCT 2

RESULT 122  
 ABQ71964/c  
 ID ABQ71964 standard; DNA; 9 BP.  
 XX  
 AC ABQ71964;  
 XX  
 DT 28-AUG-2002 (first entry)  
 XX  
 DE Zinc finger protein related oligonucleotide target SEQ ID NO:2262.

KW Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.

OS Homo sapiens.  
 OS Synthetic.

XX WO200242459-A2.

PN 30-MAY-2002.

PF 20-NOV-2001; 2001WO-US043438.

PR 20-NOV-2000; 2000US-00716637.

XX (SANG-) SANGAMO BIOSCIENCES INC.

XX Liu Q;

DR WPI; 2002-500284/53.

PT New zinc finger protein that binds to target site, useful in studying  
 PT gene function and for human therapeutics and plant engineering, comprises  
 PT first, second and third zinc fingers, ordered from N- to C-terminus.

XX Example 1; Page 59; 81pp; English.

XX The present invention describes a zinc finger protein (I) that binds to a  
 CC target site, comprising a first (F1), a second (F2), and a third (F3)  
 CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the  
 CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),  
 CC and a third (S3) target subunit. Also described are: (1) a polypeptide  
 CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and

CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it  
 CC binds to the S1 target subunit, selecting the F2 zinc finger such that it  
 CC binds to the S2 target subunit, and selecting the F3 zinc finger such  
 CC that it binds to the S3 target subunit, thus designing (I) that binds to  
 CC a target site. (I) is useful for recognition of triplet target subunits  
 CC having the nucleotide G in the 5'-most position of the subunit. (I) is  
 CC useful in studying gene function, and for human therapeutics and plant  
 CC engineering. (I), (II) or (III) is useful in therapeutic methods to  
 CC modulate the expression of a target region within a subject, in  
 CC diagnostic methods for sequence specific detection of target nucleic acid  
 CC in a sample, and in assays to determine the phenotype and function of  
 CC target sequences. (I) has improved affinity and specificity for their  
 CC target sequences, as well as enhanced biological activity. ABQ71213 to  
 CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc  
 CC finger peptides which are given in the exemplification of the present  
 CC invention  
 XX

SQ Sequence 9 BP; 3 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10  
 |||||  
 Db 9 CACCTTCT 2

RESULT 123  
 ABQ71781/c  
 ID ABQ71781 standard; DNA; 9 BP.  
 XX  
 AC ABQ71781;

XX  
 DT 28-AUG-2002 (first entry)  
 XX  
 DE Zinc finger protein related oligonucleotide target SEQ ID NO:2079.

KW Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.

OS Homo sapiens.  
 OS Synthetic.

XX WO200242459-A2.

PN 30-MAY-2002.

PF 20-NOV-2001; 2001WO-US043438.

PR 20-NOV-2000; 2000US-00716637.

XX (SANG-) SANGAMO BIOSCIENCES INC.

XX Liu Q;

DR WPI; 2002-500284/53.

PT New zinc finger protein that binds to target site, useful in studying  
 PT gene function and for human therapeutics and plant engineering, comprises  
 PT first, second and third zinc fingers, ordered from N- to C-terminus.

XX Example 1; Page 55; 81pp; English.

XX The present invention describes a zinc finger protein (I) that binds to a  
 CC target site, comprising a first (F1), a second (F2), and a third (F3)  
 CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the  
 CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),  
 CC and a third (S3) target subunit. Also described are: (1) a polypeptide  
 CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and  
 CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it  
 CC binds to the S1 target subunit, selecting the F2 zinc finger such that it  
 CC binds to the S2 target subunit, and selecting the F3 zinc finger such that it  
 CC that it binds to the S3 target subunit, thus designing (I) that binds to

CC a target site. (I) is useful for recognition of triplet target subsites  
 CC having the nucleotide G in the 5'-most position of the subsite. (I) is  
 CC useful in studying gene function, and for human therapeutics and plant  
 CC engineering. (I), (II) or (III) is useful in therapeutic methods to  
 CC modulate the expression of a target region within a subject, in  
 CC diagnostic methods for sequence specific detection of target nucleic acid  
 CC in a sample, and in assays to determined the phenotype and function of  
 CC gene expression. (I) has improved affinity and specificity for their  
 CC target sequences, as well as enhanced biological activity. ABQ71213 to  
 CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc  
 CC finger peptides which are given in the exemplification of the present  
 CC invention  
 XX  
 SQ Sequence 9 BP; 2 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8  
 |||||  
 Db 8 CCCACCTT 1

## RESULT 124

ABQ71780/c  
 ID ABQ71780 standard; DNA; 9 BP.

XX AC ABQ71780;

DT 28-AUG-2002 (first entry)

DE Zinc finger protein related oligonucleotide target SEQ ID NO:2078.

XX Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.

OS Homo sapiens.

OS Synthetic.

PN WO200242459-A2.

XX 30-MAY-2002.

PF 20-NOV-2001; 2001WO-US043438.

PR 20-NOV-2000; 2000US-00716637.

XX (SANG-) SANGAMO BIOSCIENCES INC.

XX Liu Q;

DR WPI; 2002-500284/53.

XX New zinc finger protein that binds to target site, useful in studying  
 PT gene function and for human therapeutics and plant engineering, comprises  
 PT first, second and third zinc fingers, ordered from N- to C-terminus.

XX Example 1; Page 55; 81pp; English.

XX The present invention describes a zinc finger protein (I) that binds to a  
 CC target site, comprising a first (F1), a second (F2), and a third (F3)  
 CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the  
 CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),  
 CC and a third (S3) target subsite. Also described are: (1) a polypeptide  
 CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and  
 CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it  
 CC binds to the S1 target subsite, selecting the F2 zinc finger such that it  
 CC binds to the S2 target subsite, and selecting the F3 zinc finger such  
 CC that it binds to the S3 target subsite, thus designing (I) that binds to  
 CC a target site. (I) is useful for recognition of triplet target subsites  
 CC having the nucleotide G in the 5'-most position of the subsite. (I) is  
 CC useful in studying gene function, and for human therapeutics and plant  
 CC engineering. (I), (II) or (III) is useful in therapeutic methods to

CC modulate the expression of a target region within a subject, in  
 CC diagnostic methods for sequence specific detection of target nucleic acid  
 CC in a sample, and in assays to determined the phenotype and function of  
 CC gene expression. (I) has improved affinity and specificity for their  
 CC target sequences, as well as enhanced biological activity. ABQ71213 to  
 CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc  
 CC finger peptides which are given in the exemplification of the present  
 CC invention  
 XX  
 SQ Sequence 9 BP; 2 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8  
 |||||  
 Db 8 CCCACCTT 1

## RESULT 125

ACD06034  
 ID ACD06034 standard; DNA; 9 BP.

XX AC ACD06034;

DT 05-AUG-2003 (first entry)

DE Human VEGF-targeted zinc finger protein target sequence #7.

XX Zinc finger protein; antiarteriosclerotic; vasotropic; antiarthritic;  
 KW cytosolic; antipsoriatic; ophthalmological; antidiabetic; antitumor;  
 KW vulnary; gene therapy; vascular endothelial growth factor; VEGF;  
 KW angiogenesis; atherosclerosis; ischaemia; arthritis; tumour; psoriasis;  
 KW diabetic retinopathy; ulcer; wound; ds.

XX Homo sapiens.

PN US2003044404-A1.

XX 06-MAR-2003.

PF 30-APR-2001; 2001US-00846033.

PR 07-DEC-2000; 2000US-00733604.

PR 12-DEC-2000; 2000US-00736083.

XX (REBA/) REBAR E.

PA (JAMI/) JAMIESON A.

PA (LIUQ/) LIU Q.

PA (LIUP/) LIU P.

PA (WOLF/) WOLFE A.

PA (EISE/) EISENBERG S P.

PA (JARV/) JARVIS E.

XX Rebar E, Jamieson A, Liu Q, Liu P, Wolffe A, Eisenberg SP;

PI Jarvis E;

XX WPI; 2003-456550/43.

XX New zinc finger protein that binds to a target site in the human vascular  
 PT endothelial growth factor gene, useful for regulating angiogenesis, e.g.  
 PT in the treatment of atherosclerosis, ischemia, arthritis, tumors, ulcer  
 PT or wounds.

XX Example 6; Page 42; 75pp; English.

XX The invention describes a zinc finger protein (ZFP) that binds to a  
 CC target site having a nucleotide sequence of any of the human vascular  
 CC endothelial growth factor (VEGF) genes listed in the specification. The  
 CC composition and methods are useful in regulating angiogenesis, such as in  
 CC the treatment of atherosclerosis, ischaemia, arthritis, tumours,  
 CC psoriasis, diabetic retinopathy, ulcer or wounds. The composition may

CC also be used in screening for agents capable of modulating angiogenesis,  
 CC and in various diagnostic applications. This sequence represents a  
 CC vascular endothelial growth factor (VEGF) targeting zinc finger protein  
 CC zinc finger domain target DNA

SQ Sequence 9 BP; 2 A; 2 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAGA 18  
 |||||  
 Db 1 TGGGCAGA 8

## RESULT 126

ACD19256

ID ACD19256 standard; DNA; 9 BP.

XX AC

XX ACD19256;

DT 22-AUG-2003 (first entry)

XX DE Human VEGF-targeted ZFP HUM 19A target sequence.

XX KW Zinc finger protein; vascular endothelial growth factor; VEGF; ischaemia;  
 KW atherosclerosis; tumour; arthritis; bone injury; wound; ulcer; surgery;  
 KW angiogenesis; pregnancy; embryogenesis; ds; human.

XX OS Homo sapiens.

XX PN US2003021776-A1.

XX PD 30-JAN-2003.

XX PF 06-DEC-2001; 2001US-00006069.

XX PR 07-DEC-2000; 2000US-00733604.

XX PR 12-DEC-2000; 2000US-00736083.

XX PR 30-APR-2001; 2001US-00846033.

XX PA (SANG-) SANGAMO BIOSCIENCES INC.

XX PI Rebar E, Jamieson A, Liu Q, Liu P, Wolffe A, Eisenberg SP;

XX PI Jarvis E;

XX XX WPI; 2003-466074/44.

XX DR Novel zinc finger protein that binds to a target site, useful for  
 XX PT modulating vascular endothelial growth factor gene expression, for  
 XX PT modulating angiogenesis, for wound healing and for treating ischemia.  
 XX PS Disclosure; Page 43; 120pp; English.

XX CC The invention relates to a zinc finger protein that binds to a target  
 CC site. The zinc finger protein is useful for modulating expression of a  
 CC vascular endothelial growth factor (VEGF) gene. The expression of a  
 CC number of splice variants of VEGF gene is modulated. A number of target  
 CC sites are contacted with a number of zinc finger proteins and each zinc  
 CC finger protein binds to a distinct target site. The zinc finger protein  
 CC is administered in combination with a delivery vehicle, or its nucleic  
 CC acid is administered into the cell, either in naked form or delivered in  
 CC an expression vector. The zinc finger protein or nucleic acid is useful  
 CC for treating a disease or injury such as atherosclerosis, ischaemia,  
 CC tumour, arthritis, bone injury, wounds and ulcer in a subject. The zinc  
 CC finger protein is also useful for modulating angiogenesis, by introducing  
 CC the zinc finger protein into an animal, where the animal has a genome  
 CC comprising a target site within a VEGF gene. The zinc finger protein is  
 CC also useful for screening for a modulator of expression of a VEGF gene.  
 CC The zinc finger protein and nucleic acid are also useful to promote  
 CC development of the corpus luteum and endometrium, which is useful for  
 CC initiating and/or maintaining pregnancy and for supporting embryogenesis.

CC The zinc finger protein and its nucleic acid are also useful in surgical  
 CC applications. The present sequence represents a human VEGF targetted zinc  
 CC finger protein ZFP target sequence

XX SQ Sequence 9 BP; 2 A; 2 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 11 TGGGCAGA 18  
 |||||  
 Db 1 TGGGCAGA 8

## RESULT 127

ADA64108/c

ID ADA64108 standard; DNA; 9 BP.

XX AC

XX ADA64108;

DT 20-NOV-2003 (first entry)

XX DE Zinc finger target sequence DNA #566.

XX KW ds; target sequence; zinc finger protein;  
 KW multi-finger zinc finger protein; improved affinity;  
 KW improved specificity; enhanced biological activity.

XX OS Synthetic.

XX PN US2003068675-A1.

XX PD 10-APR-2003.

XX PF 20-NOV-2001; 2001US-00990186.

XX PR 24-MAR-1999; 99US-0126238P.

XX PR 24-MAR-1999; 99US-0126238P.

XX PR 30-JUL-1999; 99US-0146595P.

XX PR 30-JUL-1999; 99US-0146615P.

XX PR 23-MAR-2000; 2000US-00535008.

XX PR 20-NOV-2000; 2000US-00716637.

XX LIUQ// LIU Q.

XX LIU Q;

XX WPI; 2003-567233/53.

XX DR Designing zinc finger protein that has three zinc fingers from N-terminus  
 XX PT and C-terminus that bind to subsites in 3' to 5' direction, in a target  
 XX PT site, by selecting zinc fingers that bind their respective subsites.  
 XX PS Disclosure; Page 22; 34pp; English.

XX CC The invention relates to a method of designing a zinc finger protein. The  
 CC method is useful for designing a zinc finger protein. The method provides  
 CC multi-finger zinc finger proteins with improved affinity and specificity  
 CC for their target sequences, as well as enhanced biological activity. The  
 CC present sequence represents a zinc finger protein DNA target sequence.

SQ Sequence 9 BP; 2 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8  
 |||||  
 Db 8 CCCACCTT 1

```

RESULT 128
ADA64291/c
ID ADA64291 standard; DNA; 9 BP.
XX AC ADA64291;
XX DT 20-NOV-2003 (first entry)
XX DE Zinc finger target sequence DNA #749.
XX KW ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX OS Synthetic.
XX PN US2003068675-A1.
XX PD 10-APR-2003.
XX PF 20-NOV-2001; 2001US-00990186.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-00535008.
XX PR 20-NOV-2000; 2000US-00716637.
XX PA (LIUQ/) LIU Q.
XX PI Liu Q;
XX WPI; 2003-567233/53.
XX PT Designing zinc finger protein that has three zinc fingers from N-terminus
PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
PT site, by selecting zinc fingers that bind their respective subsites.
XX PS Disclosure; Page 24; 34pp; English.
XX CC The invention relates to a method of designing a zinc finger protein. The
CC method is useful for designing a zinc finger protein. The method provides
CC multi-finger zinc finger proteins with improved affinity and specificity
CC for their target sequences, as well as enhanced biological activity. The
CC present sequence represents a zinc finger protein DNA target sequence.
XX SQ Sequence 9 BP; 3 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10
Db |||||
9 CACCTTCT 2

RESULT 130
ADA64107/c
ID ADA64107 standard; DNA; 9 BP.
XX AC ADA64107;
XX DT 20-NOV-2003 (first entry)
XX DE Zinc finger target sequence DNA #565.
XX KW ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX OS Synthetic.
XX PN US2003068675-A1.
XX PD 10-APR-2003.
XX PF 20-NOV-2001; 2001US-00990186.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-00535008.
XX PR 20-NOV-2000; 2000US-00716637.
XX PA (LIUQ/) LIU Q.
XX PI Liu Q;
XX WPI; 2003-567233/53.
XX PT Designing zinc finger protein that has three zinc fingers from N-terminus
PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
PT site, by selecting zinc fingers that bind their respective subsites.
XX PS Disclosure; Page 24; 34pp; English.
XX CC The invention relates to a method of designing a zinc finger protein. The
CC method is useful for designing a zinc finger protein. The method provides
CC multi-finger zinc finger proteins with improved affinity and specificity
CC for their target sequences, as well as enhanced biological activity. The
CC present sequence represents a zinc finger protein DNA target sequence.
XX SQ Sequence 9 BP; 3 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10
Db |||||
9 CACCTTCT 2

RESULT 129
ADA64292/c
ID ADA64292 standard; DNA; 9 BP.
XX AC ADA64292;
XX DT 20-NOV-2003 (first entry)
XX DE Zinc finger target sequence DNA #750.
XX KW ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX OS Synthetic.

```



XX Liu Q;  
 XX WPI; 2003-567233/53.  
 XX Designing zinc finger protein that has three zinc fingers from N-terminus  
 PT and C-terminus that bind to subsites in 3' to 5' direction, in a target  
 PT site, by selecting zinc fingers that bind their respective subsites.  
 XX Disclosure; Page 22; 34pp; English.  
 XX The invention relates to a method of designing a zinc finger protein. The  
 CC method is useful for designing a zinc finger protein. The method provides  
 CC multi-finger zinc finger proteins with improved affinity and specificity  
 CC for their target sequences, as well as enhanced biological activity. The  
 CC present sequence represents a zinc finger protein DNA target sequence.  
 XX Sequence 9 BP; 2 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 40.0%; Score 8; DB 1; Length 9;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCACCTT 8  
 DB 8 CCCACCTT 1  
 RESULT 131  
 AAZ79378/c  
 ID AAZ79378 standard; DNA; 10 BP.  
 XX AAZ79378;  
 XX 10-APR-2000 (first entry)  
 XX Human dendritic cell SAGE tag, SEQ ID NO:1806.  
 DE SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL; antitumor;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX Homo sapiens.  
 OS WO9565924-A2.  
 PN 23-DEC-1999.  
 XX 18-JUN-1999; 99WO-US013800.  
 PF 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-0089919P.  
 PR 19-JUN-1998; 98US-0089922P.  
 PR 19-JUN-1998; 98US-0089933P.  
 PR 19-JUN-1998; 98US-0089944P.  
 PR 19-JUN-1998; 98US-0089979P.  
 PR 19-JUN-1998; 98US-0089999P.  
 PR 19-JUN-1998; 98US-0090000P.  
 PR 19-JUN-1998; 98US-0090035P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.

PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX Roberts BL, Shankara S;  
 PI WPI; 2000-106077/09.  
 XX Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 PT Claim 1; Page 116; 130pp; English.  
 PS Sequences AAZ7573-279709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells. Immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX Sequence 10 BP; 1 A; 5 C; 1 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 13 GGCAGAG 20  
 DB 9 GGCAGAG 2  
 RESULT 132  
 AAZ77868  
 ID AAZ77868 standard; DNA; 10 BP.  
 XX AAZ77868;  
 XX 10-APR-2000 (first entry)  
 XX

Human dendritic cell SAGE tag, SEQ ID NO:296.

SAGE tag; serial analysis of gene expression; antigen-presenting cell; APC; monocyte-derived dendritic cell; differential gene expression; immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

Homo sapiens.

WO9965924-A2.

23-DEC-1999.

18-JUN-1999; 99WO-US013800.

19-JUN-1998; 98US-0089833P.

19-JUN-1998; 98US-0089844P.

19-JUN-1998; 98US-0089853P.

19-JUN-1998; 98US-0089878P.

19-JUN-1998; 98US-0089911P.

19-JUN-1998; 98US-0089922P.

19-JUN-1998; 98US-0089933P.

19-JUN-1998; 98US-0089944P.

19-JUN-1998; 98US-0089977P.

19-JUN-1998; 98US-0089999P.

19-JUN-1998; 98US-0090000P.

19-JUN-1998; 98US-0090035P.

19-JUN-1998; 98US-0090036P.

19-JUN-1998; 98US-0090039P.

19-JUN-1998; 98US-0090040P.

19-JUN-1998; 98US-0090041P.

19-JUN-1998; 98US-0090042P.

19-JUN-1998; 98US-0090043P.

19-JUN-1998; 98US-0090044P.

19-JUN-1998; 98US-0090045P.

19-JUN-1998; 98US-0090047P.

19-JUN-1998; 98US-0090048P.

19-JUN-1998; 98US-0090072P.

19-JUN-1998; 98US-0090076P.

19-JUN-1998; 98US-0090077P.

19-JUN-1998; 98US-0090078P.

19-JUN-1998; 98US-0090079P.

19-JUN-1998; 98US-0090080P.

08-DEC-1998; 98US-0111715P.

(GENZ ) GENZYME CORP.

(ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.

Roberts BL, Shankara S;

WPI; 2000-106077/09.

Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.

Claim 1; Page 72; 130pp; English.

Sequences AAZ77573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid

sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells

Sequence 10 BP; 1 A; 4 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10

Db 2 CACCTTCT 9

RESULT 133

AAZ78273/c

ID AAZ78273 standard; DNA; 10 BP.

XX AC AAZ78273;

XX DT 10-APR-2000 (first entry)

XX DE Human dendritic cell SAGE tag, SEQ ID NO:701.

XX KW SAGE tag; serial analysis of gene expression; antigen-presenting cell; APC; monocyte-derived dendritic cell; differential gene expression; immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

XX OS Homo sapiens.

XX FN WO9965924-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013800.

XX PR 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-0089911P.

PR 19-JUN-1998; 98US-0089922P.

PR 19-JUN-1998; 98US-0089933P.

PR 19-JUN-1998; 98US-0089944P.

PR 19-JUN-1998; 98US-0089977P.

PR 19-JUN-1998; 98US-0089999P.

PR 19-JUN-1998; 98US-0090000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090047P.

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PR 19-JUN-1998; 98US-0090048P.
PR 19-JUN-1998; 98US-0090072P.
PR 19-JUN-1998; 98US-0090076P.
PR 19-JUN-1998; 98US-0090077P.
PR 19-JUN-1998; 98US-0090078P.
PR 19-JUN-1998; 98US-0090079P.
PR 19-JUN-1998; 98US-0090080P.
PR 08-DEC-1998; 98US-0111715P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX
XX WPI; 2000-106077/09.
XX
XX Isolated polynucleotides differentially expressed in antigen-presenting
PT cells, useful in gene vaccines against cancer.
XX
XX Claim 1; Page 85; 130pp; English.
XX
XX Sequences AA277573-279709 represent SAGE (serial analysis of gene
CC expression) tags used to identify mRNA transcripts encoding
CC immunostimulatory cofactor proteins which are preferentially or
CC differentially expressed in monocyte-derived dendritic cells compared
CC with monocytes. Some of the transcripts correspond to known genes or ESTs
CC (expressed sequence tags) which were previously unknown to be
CC preferentially or differentially expressed in dendritic cells, while
CC other transcripts correspond to novel genes. Antigen-presenting cell
CC (APC)-associated costimulatory factors play an important role in the
CC activation of the cytotoxic immune response, particularly against tumour
CC cells. Tumour antigen presentation via the MHC (major histocompatibility
CC complex) and subsequent recognition by T-cell receptors is alone
CC insufficient to activate a robust cytotoxic immune response that can lyse
CC the tumour cells, immunostimulatory cofactors also being required for
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
CC sequences identified using the SAGE tags have several potential uses.
CC They may be used in vaccines to induce an immune response, particularly
CC against a tumour antigen; to modulate the genotype of an APC; to screen
CC for agents that modulate expression of differentially expressed genes in
CC an APC; and as hybridisation probes/amplification primers for the
CC diagnosis, prognosis and monitoring of diseases related to abnormal
CC expression of these genes. Detection of the dendritic cell differentially
CC expressed genes, or of their encoded proteins, can be used to identify
CC cells as belonging to the monocyte lineage. Cells containing these genes
CC can be used in active immunotherapy (or to stimulate production of a
CC population of antigen-specific effector cells) and vectors containing
CC them are used in gene therapy. Co-administration of tumour antigens and
CC APC-associated costimulatory factors ensures adequate antigen
CC presentation to endogenous APCs and upregulates the APCs for the
CC presentation of co-stimulatory signals, migration to T cell-rich sites,
CC secretion of T cell growth factors and secretion of chemokines for
CC recruitment of immune effector cells
XX
XX Sequence 10 BP; 1 A; 4 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 13 GGCAGAAG 20
Db 9 GGCAGAAG 2
|||||
RESULT 134
AAZ78942
ID AAZ78942 standard; DNA; 10 BP.
XX
AC AAZ78942;
XX
XX 10-APR-2000 (first entry)

```

Human dendritic cell SAGE tag, SEQ ID NO:1370.

SAGE tag; serial analysis of gene expression; antigen-presenting cell; APC; monocyte-derived dendritic cell; differential gene expression; immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

Homo sapiens.

WO9965924-A2.

23-DEC-1999.

18-JUN-1999; 99WO-US013800.

19-JUN-1998; 98US-0089833P.

19-JUN-1998; 98US-0089844P.

19-JUN-1998; 98US-0089853P.

19-JUN-1998; 98US-0089878P.

19-JUN-1998; 98US-0089991P.

19-JUN-1998; 98US-0089992P.

19-JUN-1998; 98US-0089993P.

19-JUN-1998; 98US-0089994P.

19-JUN-1998; 98US-0089997P.

19-JUN-1998; 98US-0089999P.

19-JUN-1998; 98US-0090000P.

19-JUN-1998; 98US-0090035P.

19-JUN-1998; 98US-0090036P.

19-JUN-1998; 98US-0090039P.

19-JUN-1998; 98US-0090040P.

19-JUN-1998; 98US-0090041P.

19-JUN-1998; 98US-0090042P.

19-JUN-1998; 98US-0090043P.

19-JUN-1998; 98US-0090044P.

19-JUN-1998; 98US-0090045P.

19-JUN-1998; 98US-0090047P.

19-JUN-1998; 98US-0090048P.

19-JUN-1998; 98US-0090072P.

19-JUN-1998; 98US-0090076P.

19-JUN-1998; 98US-0090077P.

19-JUN-1998; 98US-0090078P.

19-JUN-1998; 98US-0090079P.

19-JUN-1998; 98US-0090080P.

08-DEC-1998; 98US-0111715P.

(GENZ ) GENZYME CORP.

(ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.

Roberts BL, Shankara S;

WPI; 2000-106077/09.

Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.

Claim 1; Page 104; 130pp; English.

Sequences AA277573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for

CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 4 A; 1 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 13 GGCAGAG 20  
 Db 1 GGCAGAG 8

## RESULT 135

AAZ77770  
 ID AAZ77770 standard; DNA; 10 BP.

XX AAZ77770;

DT 10-APR-2000 (first entry)

DE Human dendritic cell SAGE tag, SEQ ID NO:198.

XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.

XX Homo sapiens.

XX WO9965924-A2.

XX 23-DEC-1999.

XX 18-JUN-1999; 99WO-US013800.

XX 19-JUN-1998; 98US-0089833P.

XX 19-JUN-1998; 98US-0089844P.

XX 19-JUN-1998; 98US-0089853P.

XX 19-JUN-1998; 98US-0089878P.

XX 19-JUN-1998; 98US-0089911P.

XX 19-JUN-1998; 98US-0089922P.

XX 19-JUN-1998; 98US-0089933P.

XX 19-JUN-1998; 98US-0089944P.

XX 19-JUN-1998; 98US-0089959P.

XX 19-JUN-1998; 98US-0090000P.

XX 19-JUN-1998; 98US-0090035P.

XX 19-JUN-1998; 98US-0090036P.

XX 19-JUN-1998; 98US-0090039P.

XX 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX Roberts BL, Shankara S;

XX WPI; 2000-106077/09.

XX Isolated polynucleotides differentially expressed in antigen-presenting

XX cells, useful in gene vaccines against cancer.

XX Claim 1; Page 69; 130pp; English.

XX Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
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 CC expression of these genes. Detection of the dendritic cell differentially  
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 CC them are used in gene therapy. Co-administration of tumour antigens and  
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 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX

SQ Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 12 GGCAGAG 19  
 Db 1 GGCAGAG 8

## RESULT 136

AAZ77870

ID AAZ77870 standard; DNA; 10 BP.

XX AAZ77870;

XX

DT 10-APR-2000 (first entry)  
 XX Human dendritic cell SAGE tag, SEQ ID NO:298.  
 DE  
 XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9965924-A2.  
 XX  
 XX 23-DEC-1999.  
 XX  
 XX 18-JUN-1999; 99WO-US013800.  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-008991P.  
 PR 19-JUN-1998; 98US-008992P.  
 PR 19-JUN-1998; 98US-008993P.  
 PR 19-JUN-1998; 98US-008994P.  
 PR 19-JUN-1998; 98US-008997P.  
 PR 19-JUN-1998; 98US-008999P.  
 PR 19-JUN-1998; 98US-009000P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX  
 PA (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
 XX  
 XX WPI; 2000-106077/09.  
 XX  
 XX Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 PT  
 XX  
 XX Claim 1; Page 72; 130pp; English.  
 PS  
 XX Sequences AA277573-279709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
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 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
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 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse

CC the tumour cells, immunostimulatory cofactors also being required for  
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 CC They may be used in vaccines to induce an immune response, particularly  
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 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
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 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 2 A; 5 C; 1 G; 2 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCACCTT 8  
 Db 3 CCCACCTT 10  
 |||||  
 RESULT 137  
 AAZ79364  
 ID AAZ79364 standard; DNA; 10 BP.  
 XX  
 AC AAZ79364;  
 XX  
 XX 10-APR-2000 (first entry)  
 XX Human dendritic cell SAGE tag, SEQ ID NO:1792.  
 DE  
 DE SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9965924-A2.  
 XX  
 XX 23-DEC-1999.  
 XX  
 XX 18-JUN-1999; 99WO-US013800.  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-008991P.  
 PR 19-JUN-1998; 98US-008992P.  
 PR 19-JUN-1998; 98US-008993P.  
 PR 19-JUN-1998; 98US-008994P.  
 PR 19-JUN-1998; 98US-008997P.  
 PR 19-JUN-1998; 98US-008999P.  
 PR 19-JUN-1998; 98US-009000P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX  
 PA (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
 XX  
 DR WPI; 2000-106077/09.  
 XX  
 PT Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 XX  
 PS Claim 1; Page 116; 130pp; English.  
 XX  
 CC Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 1 A; 3 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Fred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 5 CTTCTCTG 12  
 |||||  
 Db 1 CTTCTCTG 8  
 RESULT 138  
 AAZ79551/c  
 ID AAZ79551 standard; DNA; 10 BP.  
 XX  
 AC AAZ79551;

XX 10-APR-2000 (first entry)  
 DT Human dendritic cell SAGE tag, SEQ ID NO:1979.  
 DE  
 XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL; antitumor;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9965924-A2.  
 XX  
 PD 23-DEC-1999.  
 XX  
 PF 18-JUN-1999; 99WO-US013800.  
 XX  
 PR 19-JUN-1998; 98US-0089833P.  
 PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-0089911P.  
 PR 19-JUN-1998; 98US-0089922P.  
 PR 19-JUN-1998; 98US-0089933P.  
 PR 19-JUN-1998; 98US-0089944P.  
 PR 19-JUN-1998; 98US-0089979P.  
 PR 19-JUN-1998; 98US-0089999P.  
 PR 19-JUN-1998; 98US-0090000P.  
 PR 19-JUN-1998; 98US-0090035P.  
 PR 19-JUN-1998; 98US-0090036P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 PR 19-JUN-1998; 98US-0090042P.  
 PR 19-JUN-1998; 98US-0090043P.  
 PR 19-JUN-1998; 98US-0090044P.  
 PR 19-JUN-1998; 98US-0090045P.  
 PR 19-JUN-1998; 98US-0090047P.  
 PR 19-JUN-1998; 98US-0090048P.  
 PR 19-JUN-1998; 98US-0090072P.  
 PR 19-JUN-1998; 98US-0090076P.  
 PR 19-JUN-1998; 98US-0090077P.  
 PR 19-JUN-1998; 98US-0090078P.  
 PR 19-JUN-1998; 98US-0090079P.  
 PR 19-JUN-1998; 98US-0090080P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX  
 PA (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
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 DR WPI; 2000-106077/09.  
 XX  
 PT Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
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 PS Claim 1; Page 121; 130pp; English.  
 XX  
 CC Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene  
 CC expression) tags used to identify mRNA transcripts encoding  
 CC immunostimulatory cofactor proteins which are preferentially or  
 CC differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone

CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for  
 CC recruitment of immune effector cells  
 XX  
 SQ Sequence 10 BP; 3 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CCACCTTC 9  
 Db 9 CCACCTTC 2

## RESULT 139

AAZ83134

ID AAZ83134 standard; DNA; 10 BP.

XX AC AAZ83134;

DT 07-APR-2000 (first entry)

XX DE Metastatic breast tumour cell upregulated transcript tag #2368.

XX KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;

KW non-metastatic breast tumour tissue; gene therapy; anticancer;

XX KW antimetastatic; vaccine; diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9965928-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089997P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX PI Roberts BL, Shankara S;

XX WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and  
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
 PT treatment of cancer.

XX Claim 1; Page 123; 219pp; English.

XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
 CC that are preferentially transcribed in the metastatic breast tumour  
 CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
 CC preferentially transcribed in the primary or non-metastatic breast tumour  
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
 CC transcripts can be used for diagnosis, prognosis, monitoring and  
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
 CC by standard immunoassays or hybridisation/amplification reactions.  
 CC Compounds that modulate expression of the transcripts are potentially  
 CC useful for treatment of (metastatic) breast cancer, while promoters from  
 CC the transcripts are used to direct expression, in selected cell types, of  
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
 CC particularly an antigen-encoding sequence for use in gene or cell-based  
 CC vaccines. Polypeptides encoded by the transcripts are also useful in  
 CC vaccines; for diagnosing breast cancer and for raising specific  
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
 CC agents. Host cells that produce the polypeptides can be used to expand  
 CC and isolate populations of educated, antigen-specific immune effector  
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
 CC immunotherapy  
 XX

SQ Sequence 10 BP; 5 A; 1 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 13 GGCAGAG 20

Db 3 GGCAGAG 10

## RESULT 140

AAZ81919

ID AAZ81919 standard; DNA; 10 BP.

XX AC AAZ81919;

DT 07-APR-2000 (first entry)

XX DE Metastatic breast tumour cell upregulated transcript tag #1153.

XX KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
 KW non-metastatic breast tumour tissue; gene therapy; anticancer;  
 KW antimetastatic; vaccine; diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9965928-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089997P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

XX (GENZ ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX PI Roberts BL, Shankara S;

XX WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and  
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
 PT treatment of cancer.

XX  
PS Claim 1; Page 89; 219pp; English.  
CC  
CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
CC that are preferentially transcribed in the metastatic breast tumour  
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
CC preferentially transcribed in the primary or non-metastatic breast tumour  
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
CC transcripts can be used for diagnosis, prognosis, monitoring and  
CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
CC by standard immunoassays or hybridisation/amplification reactions.  
CC Compounds that modulate expression of the transcripts are potentially  
CC useful for treatment of (metastatic) breast cancer, while promoters from  
CC the transcripts are used to direct expression, in selected cell types, of  
CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
CC particularly an antigen-encoding sequence for use in gene or cell-based  
CC vaccines. Polypeptides encoded by the transcripts are also useful in  
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
CC agents. Host cells that produce the polypeptides can be used to expand  
CC and isolate populations of educated, antigen-specific immune effector  
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
CC immunotherapy  
XX  
SQ Sequence 10 BP; 1 A; 1 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 7 TTCTTGGG 14  
| | | | |  
Db 1 TTCTTGGG 8  
RESULT 141  
AAZ84193/c  
ID AAZ84193 standard; DNA; 10 BP.  
XX  
AC AAZ84193;  
XX  
DT 07-APR-2000 (first entry)  
XX  
XX Metastatic breast tumour cell downregulated transcript tag #3427.  
XX  
DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
KW non-metastatic breast tumour tissue; gene therapy; anticancer;  
KW antimetastatic; vaccine; diagnosis; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO9965928-A2.  
XX  
XX 23-DEC-1999.  
XX  
XX 18-JUN-1999; 99WO-US013647.  
XX  
XX 19-JUN-1998; 98US-0089853P.  
XX 19-JUN-1998; 98US-0089997P.  
XX 19-JUN-1998; 98US-0090039P.  
XX 19-JUN-1998; 98US-0090040P.  
XX 19-JUN-1998; 98US-0090041P.  
XX  
XX (GENZ ) GENZYME CORP.  
XX (ROBE/) ROBERTS B L.  
XX (SHAN/) SHANKARA S.  
XX  
XX Roberts BL, Shankara S;  
XX WPI; 2000-106079/09.  
XX  
XX Isolated polynucleotides differentially expressed between metastatic and

PT non-metastatic breast cancer cells, useful for diagnosis, prevention and  
PT treatment of cancer.  
XX  
PS Claim 1; Page 150; 219pp; English.  
XX  
CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
CC that are preferentially transcribed in the metastatic breast tumour  
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942  
CC to AAZ86677 represent tags corresponding to distinct transcripts that are  
CC preferentially transcribed in the primary or non-metastatic breast tumour  
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These  
CC transcripts can be used for diagnosis, prognosis, monitoring and  
CC treatment of breast cancer, particularly where metastatic. Diagnosis is  
CC by standard immunoassays or hybridisation/amplification reactions.  
CC Compounds that modulate expression of the transcripts are potentially  
CC useful for treatment of (metastatic) breast cancer, while promoters from  
CC the transcripts are used to direct expression, in selected cell types, of  
CC e.g. therapeutic genes (also ribozymes or antisense sequences),  
CC particularly an antigen-encoding sequence for use in gene or cell-based  
CC vaccines. Polypeptides encoded by the transcripts are also useful in  
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
CC agents. Host cells that produce the polypeptides can be used to expand  
CC and isolate populations of educated, antigen-specific immune effector  
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
CC immunotherapy  
XX  
SQ Sequence 10 BP; 2 A; 1 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCACCTT 8  
| | | | |  
Db 10 CCCACCTT 3  
RESULT 142  
AAZ82122/c  
ID AAZ82122 standard; DNA; 10 BP.  
XX  
XX AAZ82122;  
XX  
XX 07-APR-2000 (first entry)  
XX  
XX Metastatic breast tumour cell upregulated transcript tag #1356.  
XX  
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
KW non-metastatic breast tumour tissue; gene therapy; anticancer;  
KW antimetastatic; vaccine; diagnosis; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO9965928-A2.  
XX  
XX 23-DEC-1999.  
XX  
XX 18-JUN-1999; 99WO-US013647.  
XX  
XX 19-JUN-1998; 98US-0089853P.  
XX 19-JUN-1998; 98US-0089997P.  
XX 19-JUN-1998; 98US-0090039P.  
XX 19-JUN-1998; 98US-0090040P.  
XX 19-JUN-1998; 98US-0090041P.  
XX  
XX (GENZ ) GENZYME CORP.  
XX (ROBE/) ROBERTS B L.  
XX (SHAN/) SHANKARA S.  
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XX Roberts BL, Shankara S;  
XX WPI; 2000-106079/09.  
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XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
XX Claim 1; Page 95; 219pp; English.
XX
XX AA280767 to AA283941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AA283942
CC to AA286677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines; for diagnosing breast cancer and for raising specific
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 0 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 13 GCACGAAG 20
Db 10 GCACGAAG 3
|||||

RESULT 143
AAZ83647
ID AAZ83647 standard; DNA; 10 BP.
XX
AC AAZ83647;
XX
DT 07-APR-2000 (first entry)
XX
DE Metastatic breast tumour cell upregulated transcript tag #2881.
XX
KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9965928-A2.
XX
PD 23-DEC-1999.
XX
PF 18-JUN-1999; 99WO-US013647.
XX
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;

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XX WPI; 2000-106079/09.
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XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
PT
XX Claim 1; Page 136; 219pp; English.
XX
XX AA280767 to AA283941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AA283942
CC to AA286677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines; for diagnosing breast cancer and for raising specific
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 1 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 CACCTTCT 10
Db 2 CACCTTCT 9
|||||

RESULT 144
AAZ83418
ID AAZ83418 standard; DNA; 10 BP.
XX
AC AAZ83418;
XX
DT 07-APR-2000 (first entry)
XX
DE Metastatic breast tumour cell upregulated transcript tag #2652.
XX
KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9965928-A2.
XX
PD 23-DEC-1999.
XX
PF 18-JUN-1999; 99WO-US013647.
XX
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
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XX (GENZ ) GENZYME CORP.
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PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;

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XX Roberts BL, Shankara S;  
 XX WPI; 2000-106079/09.  
 XX Isolated polynucleotides differentially expressed between metastatic and  
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 XX treatment of cancer.  
 XX Claim 1; Page 130; 219pp; English.  
 XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts  
 XX that are preferentially transcribed in the metastatic breast tumour  
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 XX Compounds that modulate expression of the transcripts are potentially  
 XX useful for treatment of (metastatic) breast cancer, while promoters from  
 XX the transcripts are used to direct expression, in selected cell types, of  
 XX e.g. therapeutic genes (also ribozymes or antisense sequences),  
 XX particularly an antigen-encoding sequence for use in gene or cell-based  
 XX vaccines. Polypeptides encoded by the transcripts are also useful in  
 XX vaccines; for diagnosing breast cancer and for raising specific  
 XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
 XX agents. Host cells that produce the polypeptides can be used to expand  
 XX and isolate populations of educated, antigen-specific immune effector  
 XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
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 XX SQ Sequence 10 BP; 4 A; 2 C; 4 G; 0 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 12 GGSCAGAA 19  
 Db 2 GGSCAGAA 9  
 RESULT 145  
 AAZ82784/c  
 ID AAZ82784 standard; DNA; 10 BP.  
 XX AAZ82784;  
 AC AAZ82784;  
 XX 07-APR-2000 (first entry)  
 XX Metastatic breast tumour cell upregulated transcript tag #2018.  
 DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
 XX non-metastatic breast tumour tissue; gene therapy; anticancer;  
 KW antimetastatic; vaccine; diagnosis; ss.  
 XX Homo sapiens.  
 OS WO9965928-A2.  
 XX WO9965928-A2.  
 XX 23-DEC-1999.  
 XX 18-JUN-1999; 99WO-US013647.  
 XX 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089997P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.  
 XX (GENZ ) GENZYME CORP.

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 XX Roberts BL, Shankara S;  
 XX WPI; 2000-106079/09.  
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 XX non-metastatic breast cancer cells, useful for diagnosis, prevention and  
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 XX tissue (i.e. are downregulated in metastatic breast tumour cells). These  
 XX transcripts can be used for diagnosis, prognosis, monitoring and  
 XX treatment of breast cancer, particularly where metastatic. Diagnosis is  
 XX by standard immunoassays or hybridisation/amplification reactions.  
 XX Compounds that modulate expression of the transcripts are potentially  
 XX useful for treatment of (metastatic) breast cancer, while promoters from  
 XX the transcripts are used to direct expression, in selected cell types, of  
 XX e.g. therapeutic genes (also ribozymes or antisense sequences),  
 XX particularly an antigen-encoding sequence for use in gene or cell-based  
 XX vaccines. Polypeptides encoded by the transcripts are also useful in  
 XX vaccines; for diagnosing breast cancer and for raising specific  
 XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic  
 XX agents. Host cells that produce the polypeptides can be used to expand  
 XX and isolate populations of educated, antigen-specific immune effector  
 XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive  
 XX immunotherapy  
 XX SQ Sequence 10 BP; 2 A; 1 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTC 9  
 Db 10 CCACCTTC 3  
 RESULT 146  
 AAZ85883  
 ID AAZ85883 standard; DNA; 10 BP.  
 XX AAZ85883;  
 AC AAZ85883;  
 XX 07-APR-2000 (first entry)  
 XX Metastatic breast tumour cell downregulated transcript tag #5117.  
 DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;  
 XX non-metastatic breast tumour tissue; gene therapy; anticancer;  
 KW antimetastatic; vaccine; diagnosis; ss.  
 XX Homo sapiens.  
 OS WO9965928-A2.  
 XX WO9965928-A2.  
 XX 23-DEC-1999.  
 XX 18-JUN-1999; 99WO-US013647.  
 XX 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089997P.  
 PR 19-JUN-1998; 98US-0090039P.  
 PR 19-JUN-1998; 98US-0090040P.  
 PR 19-JUN-1998; 98US-0090041P.



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PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
XX Claim 1; Page 66; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC agents. Host cells that produce the polypeptides or as therapeutic
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 3 A; 0 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CCACCTTC 9
DB 9 CCACCTTC 2
RESULT 149
AAZ83296/C
ID AAZ83296 standard; DNA; 10 BP.
XX
XX AAZ83296;
AC
XX
XX 07-APR-2000 (first entry)
DT
XX
XX Metastatic breast tumour cell upregulated transcript tag #2530.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; Gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9965928-A2.
PN
XX 23-DEC-1999.
PD
XX 18-JUN-1999; 99WO-US013647.
PF

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XX 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
XX Claim 1; Page 127; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC agents. Host cells that produce the polypeptides or as therapeutic
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 1 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 13 GGCAGAG 20
DB 9 GGCAGAG 2
RESULT 150
AAZ84897/C
ID AAZ84897 standard; DNA; 10 BP.
XX
XX AAZ84897;
AC
XX
XX 07-APR-2000 (first entry)
DT
XX
XX Metastatic breast tumour cell downregulated transcript tag #4131.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9965928-A2.
PN
XX 23-DEC-1999.
PD

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XX 18-JUN-1999; 99WO-US013647.
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 169; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;
SQ Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10
Db 10 CACCTTCT 3

RESULT 151
AAZ81128
ID AAZ81128 standard; DNA; 10 BP.
XX
XX AAZ81128;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell upregulated transcript tag #362.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9965928-A2.

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XX 23-DEC-1999.
XX 18-JUN-1999; 99WO-US013647.
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 67; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;
SQ Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 GGGCAGAA 19
Db 1 GGGCAGAA 8

RESULT 152
AAZ83682/C
ID AAZ83682 standard; DNA; 10 BP.
XX
XX AAZ83682;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell upregulated transcript tag #2916.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX OS

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XX WO9965928-A2.
XX
XX
XX 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 137; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 3 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 40.0%; Score 8; DB 1; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2 CCACCTTC 9
XX |||||
XX 8 CCACCTTC 1
XX
XX Db
XX
XX RESULT 153
XX AAZ83851/c
XX ID AAZ83851 standard; DNA; 10 BP.
XX
XX AC AAZ83851;
XX
XX DT 07-APR-2000 (first entry)
XX
XX DE Metastatic breast tumour cell upregulated transcript tag #3085.
XX
XX KW Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX anti-metastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX WO9965928-A2.
XX 23-DEC-1999.
XX 18-JUN-1999; 99WO-US013647.
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 141; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 0 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 40.0%; Score 8; DB 1; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 12 GGGCAGAA 19
XX |||||
XX 8 GGGCAGAA 1
XX
XX Db
XX
XX RESULT 154
XX AAZ79914
XX ID AAZ79914 standard; DNA; 10 BP.
XX
XX AC AAZ79914;
XX
XX DT 10-APR-2000 (first entry)
XX
XX DE Human dendritic cell preferentially expressed SAGE tag, SEQ ID NO:205.
XX
XX KW SAGE tag; serial analysis of gene expression; diagnosis;

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KW differential gene expression; characterisation; targeted expression;  
 KW tumour; cancer; immunotherapy; ss.  
 XX Homo sapiens.

XX WO9966303-A2.

PN 23-DEC-1999.

PD 17-JUN-1999; 99WO-US013820.

XX 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-0089912P.

PR 19-JUN-1998; 98US-0089922P.

PR 19-JUN-1998; 98US-0089933P.

PR 19-JUN-1998; 98US-0089944P.

PR 19-JUN-1998; 98US-0089977P.

PR 19-JUN-1998; 98US-0089999P.

PR 19-JUN-1998; 98US-0090000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090047P.

PR 19-JUN-1998; 98US-0090048P.

PR 19-JUN-1998; 98US-0090072P.

PR 19-JUN-1998; 98US-0090076P.

PR 19-JUN-1998; 98US-0090077P.

PR 19-JUN-1998; 98US-0090078P.

PR 19-JUN-1998; 98US-0090079P.

PR 19-JUN-1998; 98US-0090080P.

PR 08-DEC-1998; 98US-0111715P.

XX (GENZ) GENZYME CORP.

PA (ROBE) ROBERTS B L.

PA (SHAN) SHANKARA S.

XX Roberts BL, Shankara S;

XX WPI; 2000-106132/09.

XX New polynucleotide useful in cancer immunotherapy.

PS Claim 1; Page 63; 97pp; English.

XX Sequences AA279710-279916 represent SAGE (serial analysis of gene

CC expression) tags used to identify mRNA transcripts which are

CC differentially expressed in a variety of normal or malignant cell types.

CC Some of the transcripts correspond to known genes or ESTs (expressed

CC sequence tags) which were previously unknown to be preferentially or

CC differentially expressed in that particular cell type, while other

CC transcripts correspond to novel genes. The invention also provides a

CC nucleotide comprising a promoter sequence derived from one of the

CC differentially expressed genes, which may optionally be operably linked

CC to a foreign nucleotide sequence, and gene delivery vehicles and host

CC cells comprising the polynucleotides of the invention. A nucleotide

CC comprising sequences AA279710-279916 may be used in diagnostic procedures

CC to characterise a cell of a specific tissue type and to determine whether

CC it is normal or malignant. They may be used to screen for agents that

CC modulate expression of differentially expressed genes compound. The

CC promoter/foreign gene construct of the invention may be used for

CC targeted expression of the foreign gene in a particular cell type. For

CC example, a promoter derived from a gene preferentially expressed in

CC dendritic cells (antigen-presenting cells, or APCs), may be operably

CC linked to a sequence encoding an immunostimulatory molecule and a

CC sequence encoding an antigen. Such a construct could be transduced into

CC APCs and would be useful for inducing an immune response by educating

CC immune effector cells in vivo, or in cancer immunotherapy

XX Sequence 10 BP; 2 A; 5 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCACCTT 8

DB 3 CCCACCTT 10

RESULT 155

AAH64317/C

ID AAH64317 standard; cDNA; 10 BP.

XX

AC AAH64317;

XX 20-SEP-2001 (first entry)

XX Human ubiquitously expressed transcriptome sequence SEQ ID NO: 1157.

XX Human; transcriptome; gene expression pattern; cancer; drug screening;

XX cancer diagnosis; cell specific gene expression; ss.

OS Homo sapiens.

XX WO200138577-A2.

PN 31-MAY-2001.

XX 21-NOV-2000; 2000WO-US031922.

XX 24-NOV-1999; 99US-00448480.

XX (UWJO) UNIV JOHNS HOPKINS.

XX Velculescu VE, Vogelstein B, Kinzler KW;

XX WPI; 2001-367706/38.

XX New isolated polynucleotides, useful for identifying specific cell type,

XX such as cancer cell, comprises transcriptomes expressed in particular

XX cell types.

XX Claim 13; Page 65; 94pp; English.

XX The present invention describes a method of identifying the type of cell

CC in a sample, involving determining which of the sequences AAH63161-

CC AAH64724 is expressed by the cell. The transcriptomes described in the

CC invention are cell-type specific, cancer specific or ubiquitously

CC expressed in humans. They can also be used to screen for drugs, reduce

CC cancer specific gene expression, standardise expression and restore the

CC function of a diseased cell or tissue. The present sequence is one of the

CC transcriptomes described in the exemplification of the invention

XX Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CACCTTCT 10

DB 10 CACCTTCT 3

RESULT 156

AAH63292

ID AAH63292 standard; cDNA; 10 BP.

XX AC AAH63292;  
XX XX  
XX DT 20-SEP-2001 (first entry)  
XX DE Human colon epithelium specific transcriptome sequence SEQ ID NO: 132.  
XX KW Human; transcriptome; gene expression pattern; cancer; drug screening;  
XX KW cancer diagnosis; cell specific gene expression; ss.  
XX OS Homo sapiens.  
XX PN WO200138577-A2.  
XX PD 31-MAY-2001.  
XX PF 21-NOV-2000; 2000WO-US031922.  
XX PR 24-NOV-1999; 99US-00448480.  
XX PA (UYJO ) UNIV JOHNS HOPKINS.  
XX PI Velculescu VE, Vogelstein B, Kinzler KW;  
XX DR WPI; 2001-367706/38.  
XX PT New isolated polynucleotides, useful for identifying specific cell type,  
XX PT such as cancer cell, comprises transcriptomes expressed in particular  
XX PT cell types.  
XX PS Claim 11; Page 42; 94pp; English.  
XX CC The present invention describes a method of identifying the type of cell  
CC in a sample, involving determining which of the sequences AAH63161-  
CC AAH64724 is expressed by the cell. The transcriptomes described in the  
CC invention are cell-type specific, cancer specific or ubiquitously  
CC expressed in humans. They can also be used to screen for drugs, reduce  
CC cancer specific gene expression, standardise expression and restore the  
CC function of a diseased cell or tissue. The present sequence is one of the  
CC transcriptomes described in the exemplification of the invention  
XX CC  
SQ Sequence 10 BP; 0 A; 4 C; 1 G; 5 T; 0 U; 0 Other;  
  
Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 5 CCTTCTTG 12  
Db 1 CCTTCTTG 8  
  
RESULT 157  
AAF69638/C  
ID AAF69638 standard; DNA; 10 BP.  
XX AC AAF69638;  
XX DT 18-APR-2001 (first entry)  
XX DE Human IL4Ralpha gene probe #278.  
XX KW Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;  
XX KW allergic disease; probe; ss.  
XX OS Homo sapiens.  
XX PN WO200104270-A1.  
XX PD 18-JAN-2001.  
XX PF 13-JUL-2000; 2000WO-US019094.  
XX XX

PR 13-JUL-1999; 99US-0143435P.  
XX XX  
XX PA (GENA-) GENAISSANCE PHARM INC.  
XX PI Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;  
XX PI Windemuth AK;  
XX DR WPI; 2001-103078/11.  
XX PT New isolated polynucleotide useful for the identification of therapeutics  
XX PT in allergic diseases is new.  
XX PS Disclosure; Page 46; 188pp; English.  
XX CC  
XX CC The present invention relates to polymorphisms of the human interleukin 4  
CC receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference  
CC sequence). Polynucleotides comprising polymorphic gene variants are  
CC useful for therapeutic purposes. For example, where a patient may benefit  
CC from expression of a particular IL4Ralpha protein isoform, an expression  
CC vector encoding the isoform may be administered to the patient. It may  
CC desirable to decrease or block expression of a particular IL4Ralpha  
CC isogene, which may be done by turning off by transforming a targeted  
CC organ, tissue or cell population with an expression vector that expresses  
CC high levels of untranslatable mRNA for the isogene. Specific therapeutics  
CC identified by these methods may be useful for allergic diseases. The  
CC present sequence is a probe for human IL4R-alpha  
XX CC  
SQ Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;  
  
Query Match 40.0%; Score 8; DB 1; Length 10;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2 CCACCTTC 9  
Db 10 CCACCTTC 3  
  
RESULT 158  
AAF35751/C  
ID AAF35751 standard; DNA; 10 BP.  
XX AC AAF35751;  
XX DT 23-MAR-2001 (first entry)  
XX DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:2490.  
XX KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;  
XX KW nor previously assigned open reading frame; nonannotated ORF; SAGE;  
XX KW serial analysis of gene expression; antifungal; tag; identification;  
XX KW linker; PCR primer; ds.  
XX OS Saccharomyces cerevisiae.  
XX PN WO200077214-A2.  
XX PD 21-DEC-2000.  
XX PF 14-JUN-2000; 2000WO-US016223.  
XX PR 16-JUN-1999; 99US-00335032.  
XX PA (UYJO ) UNIV JOHNS HOPKINS.  
XX PI Velculescu V, Vogelstein B, Kinzler K;  
XX DR WPI; 2001-061874/07.  
XX PT Yeast gene coding sequences comprising NORF genes with serial analysis of  
XX PT gene expression (SAGE) tags, useful for studying, monitoring and  
XX PT affecting phases of the cell cycle.



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PS Example; Page 88; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 4 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 ACCTTCTT 11
Db 8 ACCTTCTT 1

RESULT 159
AAF39472
ID AAF39472 standard; DNA; 10 BP.
AC AAF39472;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:6211.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
XX nor previously assigned open reading frame; nonannotated ORF; SAGE;
XX serial analysis of gene expression; antifungal; tag; identification;
XX linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of

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PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
XX Example; Page 221; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 1 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CTTCCTGG 13
Db 2 CTTCCTGG 9

RESULT 160
AAF39102
ID AAF39102 standard; DNA; 10 BP.
XX
XX AAF39102;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5841.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
XX nor previously assigned open reading frame; nonannotated ORF; SAGE;
XX serial analysis of gene expression; antifungal; tag; identification;
XX linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Velculescu V, Vogelstein B, Kinzler K;
XX PI
XX

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DR WPI; 2001-061874/07.

XX Yeast gene coding sequences comprising NORF genes with serial analysis of

PT gene expression (SAGE) tags, useful for studying, monitoring and

PT affecting phases of the cell cycle.

XX Example; Page 208; 419pp; English.

XX The present invention describes an isolated DNA molecule comprising a

CC coding sequence of a yeast gene selected from a group of 745 NORF (not

CC previously assigned open reading frame; or nonannotated ORF) genes

CC comprising a SAGE (serial analysis of gene expression) tag. Also

CC described are: (1) a method (M1) of using NORF genes to affect the cell

CC cycle comprising administering a NORF gene whose expression varies by at

CC least 10% between any two phases of the cell cycle selected from log

CC phase, S phase and G2/M; (2) a method (M2) for screening candidate

CC antifungal drugs comprising: (a) contacting a test substance with a yeast

CC cell; and (b) monitoring expression of a NORF gene whose expression

CC varies as in M1, where a test substance which modifies the expression of

CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for

CC identifying human genes which are involved in cell cycle progression

CC comprising contacting human DNA with a probe which comprises at least 10

CC contiguous nucleotides of a NORF gene whose expression varies as in M1;

CC and (4) a method (M4) for identifying a candidate drug as a member of a

CC class of drugs having a characteristic effect on gene expression in a

CC yeast cell comprising contacting a yeast cell with a candidate drug and

CC monitoring expression in the yeast cell of at least 1 NORF gene whose

CC expression is affected by the class of drugs. The NORF genes may be used

CC to study, monitor and affect phases of the cell cycle, the differentially

CC expressed genes may be used as markers of phases of the cell cycle. The

CC methods may be used to identify candidate drugs which affect the cell

CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064

CC represent SAGE tags used in the exemplification of the present invention.

CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE

CC method, in the exemplification of the present invention

XX Sequence 10 BP; 3 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

SQ Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 TTGGGCAG 17

|||||||

Db 3 TTGGGCAG 10

RESULT 161

AAF41579

ID AAF41579 standard; DNA; 10 BP.

XX AAF41579;

AC AAF41579;

XX 23-MAR-2001 (first entry)

DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:8318.

DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

KW nor previously assigned open reading frame; nonannotated ORF; SAGE;

KW serial analysis of gene expression; antifungal; tag; identification;

KW linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

OS WO200077214-A2.

XX WO200077214-A2.

PN 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX 16-JUN-1999; 99US-00335032.

XX (UYSO ) UNIV JOHNS HOPKINS.

XX Velculescu V, Vogelstein B, Kinzler K;

PI WPI; 2001-061874/07.

DR Yeast gene coding sequences comprising NORF genes with serial analysis of

XX gene expression (SAGE) tags, useful for studying, monitoring and

XX affecting phases of the cell cycle.

PT Example; Page 297; 419pp; English.

PT The present invention describes an isolated DNA molecule comprising a

PS coding sequence of a yeast gene selected from a group of 745 NORF (not

XX previously assigned open reading frame; or nonannotated ORF) genes

CC comprising a SAGE (serial analysis of gene expression) tag. Also

CC described are: (1) a method (M1) of using NORF genes to affect the cell

CC cycle comprising administering a NORF gene whose expression varies by at

CC least 10% between any two phases of the cell cycle selected from log

CC phase, S phase and G2/M; (2) a method (M2) for screening candidate

CC antifungal drugs comprising: (a) contacting a test substance with a yeast

CC cell; and (b) monitoring expression of a NORF gene whose expression

CC varies as in M1, where a test substance which modifies the expression of

CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for

CC identifying human genes which are involved in cell cycle progression

CC comprising contacting human DNA with a probe which comprises at least 10

CC contiguous nucleotides of a NORF gene whose expression varies as in M1;

CC and (4) a method (M4) for identifying a candidate drug as a member of a

CC class of drugs having a characteristic effect on gene expression in a

CC yeast cell comprising contacting a yeast cell with a candidate drug and

CC monitoring expression in the yeast cell of at least 1 NORF gene whose

CC expression is affected by the class of drugs. The NORF genes may be used

CC to study, monitor and affect phases of the cell cycle, the differentially

CC expressed genes may be used as markers of phases of the cell cycle. The

CC methods may be used to identify candidate drugs which affect the cell

CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064

CC represent SAGE tags used in the exemplification of the present invention.

CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE

CC method, in the exemplification of the present invention

XX Sequence 10 BP; 0 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

SQ Query Match 40.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CTTCTTGG 13

|||||||

Db 1 CTTCTTGG 8

RESULT 162

AAF43940/C

ID AAF43940 standard; DNA; 10 BP.

XX AAF43940;

AC AAF43940;

XX 23-MAR-2001 (first entry)

DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:12079.

DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

KW nor previously assigned open reading frame; nonannotated ORF; SAGE;

KW serial analysis of gene expression; antifungal; tag; identification;

KW linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

OS WO200077214-A2.

XX WO200077214-A2.

PN 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX (UYSO ) UNIV JOHNS HOPKINS.

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PR 16-JUN-1999; 99US-00335032.
XX (UYJO ) UNIV JOHNS HOPKINS.
PA Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
XX Example; Page 381; 419pp; English.
XX
XX The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
XX Sequence 10 BP; 0 A; 5 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 GGGCAGAA 19
Db |||||
9 GGGCAGAA 2

RESULT 163
AAF34735/c
ID AAF34735 standard; DNA; 10 BP.
XX
XX AAF34735;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:1474.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX

XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
XX Example; Page 52; 419pp; English.
XX
XX The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
XX Sequence 10 BP; 5 A; 1 C; 4 G; 0 T; 0 U; 0 Other;
SQ
Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 CCTCTCTG 12
Db |||||
9 CCTCTCTG 2

RESULT 164
AAF34229/c
ID AAF34229 standard; DNA; 10 BP.
XX
XX AAF34229;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:968.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX
XX

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PN WO200077214-A2.
XX 21-DEC-2000.
XX 14-JUN-2000; 2000WO-US016223.
XX 16-JUN-1999; 99US-00335032.
XX (UYJO ) UNIV JOHNS HOPKINS.
XX Velulescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
XX gene expression (SAGE) tags, useful for studying, monitoring and
XX affecting phases of the cell cycle.
XX Example; Page 34; 419pp; English.
XX The present invention describes an isolated DNA molecule comprising a
XX coding sequence of a yeast gene selected from a group of 745 NORF (not
XX previously assigned open reading frame; or nonannotated ORF) genes
XX comprising a SAGE (serial analysis of gene expression) tag. Also
XX described are: (1) a method (M1) of using NORF genes to affect the cell
XX cycle comprising administering a NORF gene whose expression varies by at
XX least 10% between any two phases of the cell cycle selected from log
XX phase, S phase and G2/M; (2) a method (M2) for screening candidate
XX antifungal drugs comprising: (a) contacting a test substance with a yeast
XX cell; and (b) monitoring expression of a NORF gene whose expression
XX varies as in M1, where a test substance which modifies the expression of
XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for
XX identifying human genes which are involved in cell cycle progression
XX comprising contacting human DNA with a probe which comprises at least 10
XX contiguous nucleotides of a NORF gene whose expression varies as in M1;
XX and (4) a method (M4) for identifying a candidate drug as a member of a
XX class of drugs having a characteristic effect on gene expression in a
XX yeast cell comprising contacting a yeast cell with a candidate drug and
XX monitoring expression in the yeast cell of at least 1 NORF gene whose
XX expression is affected by the classes of drugs. The NORF genes may be used
XX to study, monitor and affect phases of the cell cycle, the differentially
XX expressed genes may be used as markers of phases of the cell cycle. The
XX methods may be used to identify candidate drugs which affect the cell
XX cycle and for identification of antifungal drugs. AAF33268 to AAF44064
XX represent SAGE tags used in the exemplification of the present invention.
XX AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
XX method, in the exemplification of the present invention
XX Sequence 10 BP; 3 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
SQ Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 CACCTTCT 10
DB 10 CACCTTCT 3
RESULT 165
AAF37328/c
ID AAF37328 standard; DNA; 10 BP.
XX AAF37328;
AC AAF37328;
XX 23-MAR-2001 (first entry)
DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:4067.
DE Yeast; Saccharomyces cerevisiae; Characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.

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XX OS Saccharomyces cerevisiae.
XX PN WO200077214-A2.
XX XX 21-DEC-2000.
XX XX 14-JUN-2000; 2000WO-US016223.
XX PF 16-JUN-1999; 99US-00335032.
XX PR 16-JUN-1999; 99US-00335032.
XX PA (UYJO ) UNIV JOHNS HOPKINS.
XX PI Velulescu V, Vogelstein B, Kinzler K;
XX DR WPI; 2001-061874/07.
XX PT Yeast gene coding sequences comprising NORF genes with serial analysis of
XX gene expression (SAGE) tags, useful for studying, monitoring and
XX affecting phases of the cell cycle.
XX PT Example; Page 145; 419pp; English.
XX PS The present invention describes an isolated DNA molecule comprising a
XX coding sequence of a yeast gene selected from a group of 745 NORF (not
XX previously assigned open reading frame; or nonannotated ORF) genes
XX comprising a SAGE (serial analysis of gene expression) tag. Also
XX described are: (1) a method (M1) of using NORF genes to affect the cell
XX cycle comprising administering a NORF gene whose expression varies by at
XX least 10% between any two phases of the cell cycle selected from log
XX phase, S phase and G2/M; (2) a method (M2) for screening candidate
XX antifungal drugs comprising: (a) contacting a test substance with a yeast
XX cell; and (b) monitoring expression of a NORF gene whose expression
XX varies as in M1, where a test substance which modifies the expression of
XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for
XX identifying human genes which are involved in cell cycle progression
XX comprising contacting human DNA with a probe which comprises at least 10
XX contiguous nucleotides of a NORF gene whose expression varies as in M1;
XX and (4) a method (M4) for identifying a candidate drug as a member of a
XX class of drugs having a characteristic effect on gene expression in a
XX yeast cell comprising contacting a yeast cell with a candidate drug and
XX monitoring expression in the yeast cell of at least 1 NORF gene whose
XX expression is affected by the classes of drugs. The NORF genes may be used
XX to study, monitor and affect phases of the cell cycle, the differentially
XX expressed genes may be used as markers of phases of the cell cycle. The
XX methods may be used to identify candidate drugs which affect the cell
XX cycle and for identification of antifungal drugs. AAF33268 to AAF44064
XX represent SAGE tags used in the exemplification of the present invention.
XX AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
XX method, in the exemplification of the present invention
XX Sequence 10 BP; 4 A; 2 C; 4 G; 0 T; 0 U; 0 Other;
SQ Query Match 40.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5 CCTTCTTG 12
DB 8 CCTTCTTG 1
RESULT 166
ABK24258/c
ID ABK24258 standard; DNA; 10 BP.
XX ABK24258;
AC ABK24258;
XX 09-APR-2002 (first entry)
DT Retinaldehyde-binding protein 1 ASO primer extension primer #31.
DE Human; retinaldehyde-binding protein 1; ss; RLBPI; haplotype; primer;
KW

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KW genotyping; probe; autosomal recessive retinitis pigmentosa; arRP; PCR;  
KW chromosome 15q26; transgenic; ASO; allele specific oligonucleotide.  
XX  
OS Homo sapiens.  
XX WO200192278-A2.  
PN  
PD 06-DEC-2001.  
XX  
XX 29-MAY-2001; 2001WO-US017252.  
XX  
XX 26-MAY-2000; 2000US-0207618P.  
XX  
XX (GENA-) GENAISSANCE PHARM INC.  
XX  
XX Choi JY, Kazemi A, Koshy B;  
XX WPI; 2002-122053/16.  
XX  
XX New genetic variants having polymorphisms in the retinaldehyde-binding  
PT protein 1 gene, useful for studying the function of and for expressing  
PT RLBPI protein for use in screening drugs for treating diseases related to  
PT RLBPI activity.  
XX  
XX Claim 18; Page 14; 107pp; English.  
XX  
XX The invention relates to an isolated polynucleotide, which comprises  
CC genes and haplotypes of the retinaldehyde-binding protein 1 (RLBPI) gene.  
CC The polynucleotide comprises polymorphic sites in the RLBPI gene, which  
CC are referred to as PSI-24 to designate the order in which they are  
CC located in the gene. Also included are methods for haplotyping or  
CC genotyping the RLBPI gene of an individual, a method for predicting a  
CC haplotype pair for the RLBPI gene of an individual, a method for  
CC identifying an association between a trait and at least one haplotype or  
CC haplotype pair of the RLBPI gene, a composition comprising at least one  
CC genotyping oligonucleotide for detecting a polymorphism in the RLBPI gene  
CC at a PS consisting of PSI-PS24, a kit for genotyping the RLBPI gene of an  
CC individual comprising a set of oligonucleotides designed to genotype each  
CC of PSI-PS24 recombinant non-human organisms transformed or transfected  
CC with the isolated polynucleotide, where the organism expresses a RLBPI  
CC protein encoded by the first nucleotide sequence or expresses an RLBPI  
CC protein encoded by the polymorphic variant sequence, an isolated  
CC polypeptide comprising an amino acid sequence that is a polymorphic  
CC variant of a reference sequence for the RLBPI protein or its fragment, an  
CC anti-RLBPI antibody, a method for screening for drugs targeting the  
CC isolated polypeptide, and a computer system for storing and analysing  
CC polymorphism data for the RLBPI oncogene gene. The polynucleotide  
CC comprising polymorphisms in the RLBPI gene is useful in studying the  
CC expression and function of RLBPI, and in expressing RLBPI protein for use  
CC in screening candidate drugs to treat diseases related to RLBPI activity  
CC (e.g. autosomal recessive retinitis pigmentosa (arRP)). The methods and  
CC haplotypes are useful in improving the efficiency and output of several  
CC steps in the drug discovery and development process, including target  
CC validation, identifying lead compounds, and early phase clinical trials.  
CC These are also useful for designing clinical trials of candidate drugs  
CC for treating a specific condition or disease, as well as for screening  
CC compounds targeting RLBPI to treat a specific condition or disease  
CC predicted to be associated with RLBPI activity. The kit and method are  
CC useful for determining whether an individual has one of the haplotypes or  
CC haplotype pairs cited above. The transgenic animals are useful for  
CC studying expression of the RLBPI isogenes in vivo, for in vivo screening  
CC and testing of drugs targeted against RLBPI protein, and for testing the  
CC efficacy of therapeutic agents and compounds for retinal diseases in a  
CC biological system. The gene for RLBPI is located on chromosome 15q26. The  
CC present sequence is an allele specific oligonucleotide (ASO) PCR primer  
CC for amplifying a nucleic acid containing a polymorphic RLBPI sequence,  
XX using the primer extension method  
XX  
XX Sequence 10 BP; 3 A; 4 C; 2 G; 1 T; 0 U; 0 Other;  
XX  
XX Query Match 40.0%; Score 8; DB 1; Length 10;  
XX Best Local Similarity 100.0%; Pred. No. 58;  
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 TCTTGGGC 15  
DB 8 TCTTGGGC 1  
RESULT 167  
ABK23697/c  
ID ABK23697 standard; DNA; 10 BP.  
XX  
XX AC ABK23697;  
XX  
XX DT 09-APR-2002 (first entry)  
XX  
XX Transcript tag DNA sequence #286 induced or suppressed by N-myc.  
XX Myc-dependent downstream gene; neoplastic; cancer; growth; invasion;  
KW spread; myc target; myc tag; SAGE; serial analysis of gene expression;  
KW myc oncogene; N-myc; human neuroblastoma; cytostatic; ds.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200185941-A2.  
XX  
XX PD 15-NOV-2001.  
XX  
XX PF 11-MAY-2001; 2001WO-NL000361.  
XX  
XX PR 11-MAY-2000; 2000EP-00201698.  
XX 29-JUN-2000; 2000EP-00202284.  
XX (UYAM-) UNIV AMSTERDAM ACAD ZIEKENHUIS BIJ VAN.  
XX  
XX PI Versteeg R, Caron HN;  
XX WPI; 2002-066603/09.  
XX  
XX A new nucleic acid library of myc-dependent downstream genes capable of  
PT supporting a neoplastic characteristic of cancer is useful to find new  
PT therapies and diagnoses for cancer.  
XX  
XX Disclosure; Page 57; 69pp; English.  
XX  
XX The present invention relates to a nucleic acid library comprising myc-  
CC dependent downstream genes or their functional fragments essentially  
CC capable of supporting a neoplastic character of cancer such as growth,  
CC invasion or spread. These myc target or tag sequences are identified by  
CC SAGE (serial analysis of gene expression). The library is also useful to  
CC new diagnoses and treatments for cancer. The invention is also useful to  
CC enhance production of recombinant proteins in a production system with  
CC high expression of endogenous or transfected myc oncogenes. ABK23412-  
CC ABK23828 represent transcript tag DNA sequences that are activated or  
CC repressed by N-myc in human neuroblastoma  
XX  
XX Sequence 10 BP; 1 A; 4 C; 1 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 40.0%; Score 8; DB 1; Length 10;  
XX Best Local Similarity 100.0%; Pred. No. 58;  
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 13 GGCAGAG 20  
DB 9 GGCAGAG 2  
RESULT 168  
AAS16818  
ID AAS16818 standard; DNA; 10 BP.  
XX  
XX AC AAS16818;  
XX  
XX DT 14-FEB-2002 (first entry)  
XX

DE Human apolipoprotein C1 (APOC1) gene PCR primer #4.  
 XX Human; apolipoprotein C1; APOC1; single nucleotide polymorphism;  
 KW haplotyping; haplotype pair; hypercholesterolemia; noctropic; SDAT; ss;  
 KW senile dementia of Alzheimer's type; neuroprotective; antilipamic;  
 KW PCR primer.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200177129-A2.  
 PN  
 XX 18-OCT-2001.  
 XX  
 PD 10-APR-2001; 2001WO-US011808.  
 XX  
 PF 11-APR-2000; 2000US-0196545P.  
 XX  
 PR (GENA-) GENAISSANCE PHARM INC.  
 XX  
 PA Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;  
 XX WPI; 2002-041286/05.  
 XX  
 PI New haplotypes of the human apolipoprotein C1 gene, useful to detect and  
 XX find treatment for disease associated with its activity such as  
 PT hypercholesterolemia and Alzheimer's disease.  
 XX  
 XX Claim 18; Page 13; 51pp; English.  
 PS  
 CC The invention relates to single nucleotide polymorphisms in the human  
 CC apolipoprotein C1 (APOC1) gene. Haplotyping the APOC1 gene of an  
 CC individual, comprises determining if the individual has one of the APOC1  
 CC haplotypes or haplotype pairs fully defined in the specification.  
 CC Genotyping the APOC1 gene of an individual, comprises determining the  
 CC identity of the nucleotide pair at one or more polymorphic sites and  
 CC predicting a haplotype pair for the APOC1 gene of an individual by  
 CC enumerating all possible haplotype pairs which are consistent with the  
 CC genotype, comparing the possible haplotype pairs to the data detailed in  
 CC the specification and assigning a haplotype pair to the individual that  
 CC is consistent with the data. Identifying an association between a trait  
 CC and a haplotype or haplotype pair of the APOC1 gene, comprises comparing  
 CC the frequency of the haplotype/haplotype pair in a population exhibiting  
 CC the trait with that of a reference population, where the  
 CC haplotype/haplotype pair is one described in the specification and a  
 CC higher frequency in the trait population indicates the trait is  
 CC associated with the haplotype. The sequences and methods of the invention  
 CC are used to diagnose and develop treatment for disease associated with  
 CC APOC1 activity, such as hypercholesterolemia and senile dementia of  
 CC Alzheimer's type (SDAT). This sequence represents a PCR primer used for  
 CC detecting human APOC1 DNA polymorphisms  
 XX  
 SQ Sequence 10 BP; 2 A; 5 C; 1 G; 2 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 CCACCTTC 9  
 DB |||||  
 2 CCACCTTC 9  
 RESULT 169  
 ADC09948  
 ID ADC09948 standard; DNA; 10 BP.  
 XX  
 AC ADC09948;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 XX Optical nucleic acid sensor molecule-related oligo, SEQ ID 360.  
 DE  
 XX Nucleic acid sensor molecule; ligase; cis-hammerhead; protein kinase; ds.  
 KW

XX Synthetic.  
 OS WO2003014375-A2.  
 XX  
 PN 20-FEB-2003.  
 XX  
 PD 09-AUG-2002; 2002WO-US025319.  
 XX  
 PF 09-AUG-2001; 2001US-0311378P.  
 XX  
 PR 21-AUG-2001; 2001US-0313932P.  
 XX  
 PR 13-SEP-2001; 2001US-00952680.  
 XX  
 PR 13-SEP-2001; 2001US-0338186P.  
 XX  
 PR 18-JAN-2002; 2002US-0349959P.  
 XX  
 PR 13-MAR-2002; 2002US-034486P.  
 XX  
 PR 25-MAR-2002; 2002US-0367991P.  
 XX  
 PR 04-APR-2002; 2002US-0369887P.  
 XX  
 PR 01-MAY-2002; 2002US-0376744P.  
 XX  
 PR 31-MAY-2002; 2002US-0385097P.  
 XX  
 PA (ARCH-) ARCHEMIX CORP.  
 XX  
 PI Stanton M, Epstein D, Hamaguchi N, Kurz M, Keefe T, Wilson C;  
 XX Grate D, Marshall KA, Mccauley T, Kurz J;  
 XX WPI; 2003-300534/29.  
 DR  
 XX  
 PT Nucleic acid sensor molecule, for identifying/detecting protein kinase in  
 PT a sample, comprises a target modulation domain which recognizes a target  
 PT molecule, a linker domain, a catalytic domain, and an optical signal  
 PT generator.  
 XX  
 PS Example 39; SEQ ID NO 360; 423pp; English.  
 XX  
 CC The present invention relates to nucleic acid sensor molecules (I), which  
 CC comprise a target modulation domain that recognizes a target molecule  
 CC (TM), a linker domain, a catalytic domain, and an optical signal  
 CC generating unit. The catalytic domain comprises a ligase or cis-  
 CC hammerhead. (I) are useful for identifying or detecting TM in a sample,  
 CC preferably a protein kinase in a sample. Target molecules include  
 CC proteins, post-translationally modified forms of proteins, peptides,  
 CC nucleic acids, oligosaccharides, nucleotides, metabolites, drugs, toxins,  
 CC biohazards, ions, carbohydrates, polysaccharides, hormones, receptors,  
 CC antigens, antibodies, viruses, metabolites, co-factors, drugs, dyes,  
 CC nutrients, growth factors, cGMP, cAMP or cGMP, protein kinase,  
 CC phosphorylated protein kinase, extracellular signal regulated kinase  
 CC (ERK), a component or product of mitogen activated protein (MAP) kinase  
 CC pathway, a MAP kinase pathway associated protein, an extracellular  
 CC component of MAP kinase pathway, a component of ERK1/2 MAP, JNK MAP or  
 CC P38 MAP kinase pathway, an endogenous form of MAP kinase (MEK), MAP  
 CC kinase kinase, or MAP kinase (MEKKK), or RAF kinase, Ras protein,  
 CC phosphatase, GTP binding protein, G-protein coupled receptor (GPCR),  
 CC cytokine, growth factor, cellular metabolite, small molecule or lysozyme.  
 CC (I) are also useful for identifying a modulator of protein kinase  
 CC activity. The present sequence was used to illustrate the invention.  
 XX  
 SQ Sequence 10 BP; 0 A; 1 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 40.0%; Score 8; DB 1; Length 10;  
 Best Local Similarity 100.0%; Pred. No. 58;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 7 TTCTTGGG 14  
 DB |||||  
 2 TTCTTGGG 9  
 RESULT 170  
 AAL62417/c  
 ID AAL62417 standard; DNA; 20 BP.  
 XX  
 XX AAL62417;  
 AC  
 XX

DT 06-OCT-2003 (first entry)  
XX Human ABC transporter MHC I antisense oligonucleotide, ISIS 206598.  
DE ABC transporter; ABC1; major histocompatibility complex; MHC; cytostatic;  
XX hyperproliferative; autoimmune disorder; antisense gene therapy;  
KW inflammation; tumour formation; immunosuppressive; antimicrobial; human;  
KW phosphorothioate backbone; antisense; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX WO2003051309-A2.  
XX  
XX 26-JUN-2003.  
XX  
XX 12-DEC-2002; 2002WO-US040101.  
XX  
XX 17-DEC-2001; 2001US-00024369.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Borchers AH, Ward DT, Freier SM;  
XX WPI; 2003-577305/54.  
XX  
XX New antisense compound that hybridizes and inhibits the nucleic acid  
FT encoding ABC transporter major histocompatibility complex 1, for treating  
FT diseases or conditions such as a hyperproliferative or autoimmune  
FT disorder.  
XX  
XX Claim 3; Page 81; 112pp; English.  
XX  
XX The invention relates to a compound targetted to a nucleic acid molecule  
CC encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1  
CC where the compound specifically hybridises with the nucleic acid molecule  
CC and inhibits expression of ATM or specifically hybridises with at least a  
CC portion of an active site on the nucleic acid molecule. The invention is  
CC useful for inhibiting the expression of ATM in cells or tissues. The  
CC invention is useful for treating an animal with hyperproliferative or  
CC autoimmune disorder. The invention is useful for diagnostics,  
CC therapeutics, prophylaxis, as research reagents and kits, for  
CC distinguishing functions of various members of a biological pathway and  
CC in antisense gene therapy. The invention is also useful prophylactically  
CC e.g., to prevent or delay infection, inflammation or tumour formation.  
CC The present sequence is an antisense oligo targetted to human ABC  
CC transporter MHC I DNA. This sequence is used to illustrate the method of  
CC the invention  
XX  
XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 35.0%; Score 7; DB 1; Length 20;  
Best Local Similarity 66.7%; Pred. No. 1.4e+02;  
Matches 10; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 6 CTTCTTGGCAGAG 20  
DB 20 CTTCTGCCAGAG 6

RESULT 171  
ABH88612/c  
ID ABH88612 standard; DNA; 12 BP.  
XX  
AC ABH88612;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 288605 for detecting SNP TSC0013593.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
XX WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
XX (EPITG-) EPIGENOMICS AG.  
XX  
XX Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX Claim 1; SEQ ID NO 288605; 29pp + Sequence Listing; German.  
XX  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 32.0%; Score 6.4; DB 1; Length 12;  
Best Local Similarity 87.5%; Pred. No. 1.5e+02;  
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 13 GGCAGAG 20  
DB 11 GGAAGAG 4

RESULT 172  
ABH88613/c  
ID ABH88613 standard; DNA; 12 BP.  
XX  
AC ABH88613;  
XX  
DT 22-FEB-2002 (first entry)  
XX  
DE Oligonucleotide primer SEQ ID NO 288606 for detecting SNP TSC0013593.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 OS Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 286606; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX Sequence 12 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 32.0%; Score 6.4; DB 1; Length 12;  
 Best Local Similarity 87.5%; Pred. NO. 1.5e+02;  
 Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 13 GGCAGAG 20  
 Db 11 GGAAGAAG 4  
 || |||||  
 || |||||  
 RESULT 173  
 AAZ79378  
 ID AAZ79378 standard; DNA; 10 BP.  
 XX  
 AC AAZ79378;  
 XX  
 DT 10-APR-2000 (first entry)  
 XX  
 DE Human dendritic cell SAGE tag, SEQ ID NO:1806.  
 XX  
 XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;  
 KW APC; monocyte-derived dendritic cell; differential gene expression;  
 KW immunostimulatory cofactor; costimulatory factor; CTL;  
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9965924-A2.  
 XX  
 XX 23-DEC-1999.  
 PD  
 XX 18-JUN-1999; 99WO-US013800.  
 PF  
 XX 19-JUN-1998; 98US-0089833P.  
 PR

PR 19-JUN-1998; 98US-0089844P.  
 PR 19-JUN-1998; 98US-0089853P.  
 PR 19-JUN-1998; 98US-0089878P.  
 PR 19-JUN-1998; 98US-008991P.  
 PR 19-JUN-1998; 98US-008992P.  
 PR 19-JUN-1998; 98US-008993P.  
 PR 19-JUN-1998; 98US-008994P.  
 PR 19-JUN-1998; 98US-008997P.  
 PR 19-JUN-1998; 98US-008999P.  
 PR 19-JUN-1998; 98US-009000P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-009003P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009004P.  
 PR 19-JUN-1998; 98US-009007P.  
 PR 19-JUN-1998; 98US-009007P.  
 PR 19-JUN-1998; 98US-009007P.  
 PR 19-JUN-1998; 98US-009007P.  
 PR 19-JUN-1998; 98US-009008P.  
 PR 08-DEC-1998; 98US-0111715P.  
 XX (GENZ ) GENZYME CORP.  
 PA (ROBE/) ROBERTS B L.  
 PA (SHAN/) SHANKARA S.  
 XX  
 PI Roberts BL, Shankara S;  
 XX WPI; 2000-106077/09.  
 DR  
 PT Isolated polynucleotides differentially expressed in antigen-presenting  
 PT cells, useful in gene vaccines against cancer.  
 XX  
 Claim 1; Page 116; 130pp; English.  
 Sequences AAZ77573-279709 represent SAGE (serial analysis of gene  
 expression) tags used to identify mRNA transcripts encoding  
 immunostimulatory cofactor proteins which are preferentially or  
 differentially expressed in monocyte-derived dendritic cells compared  
 CC with monocytes. Some of the transcripts correspond to known genes or ESTs  
 CC (expressed sequence tags) which were previously unknown to be  
 CC preferentially or differentially expressed in dendritic cells, while  
 CC other transcripts correspond to novel genes. Antigen-presenting cell  
 CC (APC)-associated costimulatory factors play an important role in the  
 CC activation of the cytotoxic immune response, particularly against tumour  
 CC cells. Tumour antigen presentation via the MHC (major histocompatibility  
 CC complex) and subsequent recognition by T-cell receptors is alone  
 CC insufficient to activate a robust cytotoxic immune response that can lyse  
 CC the tumour cells, immunostimulatory cofactors also being required for  
 CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid  
 CC sequences identified using the SAGE tags have several potential uses.  
 CC They may be used in vaccines to induce an immune response, particularly  
 CC against a tumour antigen; to modulate the genotype of an APC; to screen  
 CC for agents that modulate expression of differentially expressed genes in  
 CC an APC; and as hybridisation probes/amplification primers for the  
 CC diagnosis, prognosis and monitoring of diseases related to abnormal  
 CC expression of these genes. Detection of the dendritic cell differentially  
 CC expressed genes, or of their encoded proteins, can be used to identify  
 CC cells as belonging to the monocyte lineage. Cells containing these genes  
 CC can be used in active immunotherapy (or to stimulate production of a  
 CC population of antigen-specific effector cells) and vectors containing  
 CC them are used in gene therapy. Co-administration of tumour antigens and  
 CC APC-associated costimulatory factors ensures adequate antigen  
 CC presentation to endogenous APCs and upregulates the APCs for the  
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,  
 CC secretion of T cell growth factors and secretion of chemokines for